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COASTAL AREA MANAGEMENT ACT

LAND USE PLAN

ONSLOW COUNTY, NORTH CAROLINA

N.C. COASTAL RESOURCES COMMISSION

HD
211
.N8
O57
1990

ONslow COUNTY

Office of the
County Manager

November 2, 1976

107 New Bridge Street
Jacksonville, N.C. 28540
Telephone (919) 347-4717

Mr. David Stick
Department of Natural & Economic
Resources
Coastal Resources Commission
P. O. Box 27687
Raleigh, North Carolina 27611

Dear Mr. Stick:

I Thomas M. Roach, Onslow County Clerk, certify that this is a true copy of the Onslow County Land Use Plan and Synopsis adopted by the Onslow County Board of Commissioners on November 1, 1976, in fulfillment of the requirements of the North Carolina Coastal Area Management Act of 1976.

Sincerely,



Thomas M. Roach
Clerk to Board of Commissioners

bf

N.C. COASTAL RESOURCES COMMISSION

HD 21. N8 057 1970

ONSLOW COUNTY LAND USE PLAN

Coastal Area Management Act

FINAL

Prepared with the assistance of
the Onslow County Planning Department
and Dexter G. Moore, Moore and Associates
New Bern, North Carolina

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All major policy related maps and documents are either included within the text or attached to the back of the plan. However, due to the expense and technical limitations required for reprinting some illustrations may be omitted. Complete copies are available for inspection at the N. C. Coastal Resources Commission offices in Raleigh or at the local government offices.

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INTRODUCTION

The coastal areas of North Carolina provide a tremendous natural resource to the citizens of North Carolina. The area provides both recreational benefits and food production from our coastal waters. In some areas adjacent to our coastal waters, there is a danger that overdevelopment may significantly damage the food production capacity of nearby waters. This potential problem was the major reason that the Coastal Area Management Act was ratified by the North Carolina General Assembly in 1974. The purpose of the Coastal Area Management Act is "to insure the orderly balance of use and preservation of our coastal resources on behalf of the people of North Carolina and the nation." The Coastal Resources Commission was created to insure that the purpose of the new state law is followed.

Land Use Plans have been developed by each local government within the twenty coastal counties and will be the administrative tools for carrying out the provisions of the law. These plans cannot survive unless they represent the views of the local citizens. For this reason the Coastal Resources Commission has required that a public participation program be the foundation of the Land Use Plan.

The Coastal Area Management Act creates three tools with which local government can meet the management requirements of the act.

1. Land Use Plan: The preparation of a usable land use plan begins with citizen input in the development of local land use issues, goals, and objectives, continues with a summary of data collection and finishes with maps of a land classification system. The plan is prepared after careful evaluation of existing land usage and consideration of the desires of the residents of the county.
2. Areas of Environmental Concern: The Coastal Resources Commission will designate the Areas by October 1, 1976. Caution is the key element for development within Areas of Environmental Concern (AEC's). AEC's are found primarily in the coastal areas of the county.
3. Permit System: A permit system is the third tool specified by the act. The general statutes instruct the Coastal Resources Commission to develop a system which will coordinate all regulatory permits within coastal areas. Every development within the Areas of Environmental Concern will require a permit from either the Coastal Resources Commission or from local government. The act does not, however, require a permit for areas outside the Areas of Environmental Concern. By

letting permits for development of Areas of Environmental Concern, the CRC hopes to curtail environmentally damaging development within the Areas of Environmental Concern.

The following Plan is the Coastal Area Management Act Land Use Plan for the County of Onslow.

DESCRIPTION OF PRESENT CONDITIONS

POPULATION

Onslow County is located in the southern central portion of the North Carolina Coastal Plan. The County was basically rural until Camp Lejeune was located in the County in 1941. As a new industry, the Marine Corps Base provided jobs, attracted people and changed the growth pattern until this day. Growth exploded between 1940 and 1960. The following table indicates growth since 1930.

Table 1

ONSLow COUNTY POPULATION GROWTH 1930-1975

<u>Year</u>	<u>Population</u>	<u>Percent of Increase</u>
1930	15,289	17%
1940	17,939	17%
1950	42,047	134%
1960	86,208	105%
1970	103,126	20%
1975	113,806	9%

The 1974 population estimate by the North Carolina Department of Administration for Onslow County was listed at 95,100. This estimate does not follow the trend of the past decade. Onslow County planners estimate the 1975 population to be 113,806. Because of present growth trends, the local population estimate seems more appropriate than that of the state projection.

Onslow County has 756.4 square miles of land with a population density in 1975 of 150.5 people per square mile. The County is more than one half urban as compared to the predominantly rural nature of surrounding counties. The urban

population is 57.5% of the total population. The rural segment consisted of 42.5% of the people in Onslow County during the 1970 census. In 1970, Onslow County was the ninth most populous county in North Carolina.

The following table shows Onslow County population by age groups, sex, a large number of males in the 1-24 year old category, and ethnic origin in 1970 according to the census. This occurrence is due to the young men in the Marine Corps on Camp Lejeune. The population is considered transient although stable in number. As population increases the number will grow but not proportionately to the county population because the number of male recruits in the Marine Corps is expected to remain stable.

Table 2

**ONslow COUNTY POPULATION BY AGE GROUPS, SEX AND RACE
1970 CENSUS**

	WHITE		NEGRO		OTHERS		TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female
Under 5	4,056	3,772	810	824	77	77	4,936	4,673
5-14	7,508	7,077	1,615	1,639	105	93	9,228	8,809
15-24	28,006	8,442	4,637	1,295	441	106	33,094	9,843
25-34	5,761	5,152	867	842	61	244	6,689	6,538
35-44	3,923	3,429	535	589	48	148	4,506	4,166
45-54	2,304	2,317	348	379	8	12	2,660	2,708
55-64	1,223	1,382	259	312	0	6	1,482	1,700
65 & over	859	1,106	203	233	2	1	1,064	1,340
TOTAL	53,640	32,677	9,274	6,113	735	687	63,649	39,477

PERCENTAGE MALE-FEMALE	
Total	18 years & over
61.7 Male	66.0 Male
38.3 Female	34.0 Female

Total Population 103,126

White 86,317
 Negro 15,387
 Others 1,422

These totals include all of Onslow County

% of Population

83.7
 14.9
 1.4

The following breakdown of Onslow County's population for 1975 was developed by the County Manpower Planning Office based on information from North Carolina Department of Administration. Where information provided by the state was inadequate, a straight line projection was applied to the 1970 census.

Table 3

ESTIMATE OF
AGE DISTRIBUTION BY ETHNIC ORIGIN AND SEX (1975) (Estimated)

<u>Ethnic Origin & Sex</u>	<u>Total</u>	<u>0-14</u>	<u>15-44</u>	<u>45-64</u>	<u>65+</u>
White	94,161	21,207	62,208	8,391	2,355
Male	58,122	10,971	42,114	4,003	1,034
Female	36,039	10,236	20,094	4,388	1,321
Black	16,756	4,377	10,646	1,245	488
Male	10,179	2,169	7,254	542	214
Female	6,577	2,208	3,392	703	274
Other	2,892	755	1,838	215	84
Male	1,417	374	912	94	37
Female	1,475	381	926	121	47
TOTAL	113,809	26,339	74,692	9,851	2,927
Male	69,718	13,514	50,280	4,639	1,285
Female	44,091	12,825	24,412	5,212	1,542

Table 4

POPULATION OF ONSLOW COUNTY BY AREA
(1975) Estimated)

	<u>Population</u>
Swansboro	1,250
Richlands	935
Holly Ridge	415
West Onslow Beach	3,670
Military	67,392
Jacksonville	19,000
County (Rural)	<u>21,147</u>
TOTAL COUNTY	113,809

MILITARY POPULATION

Onslow County's military population represents a subgroup requiring specialized government services. It is useful to know the size of Onslow's "military family."

Table 5

MILITARY POPULATION IN ONSLOW COUNTY (Estimated)

	1960	1970	1974
Total Active Duty	36,525	36,044	39,157
living on base	20,508	25,340	
living off base	16,017	11,704	
Total Dependent	32,037*	40,316	43,797*
living on base	9,940*	12,695	11,481
living off base	22,097*	27,621	32,216*
Total Active Duty and Dependent Population	68,562	76,360	82,954*
Percent of County Population	79%	74%	

*estimated figures

SOURCE: Onslow County Manpower Planner, Dec., 1974

In 1960, there was 0.8 dependents residing in Onslow County for each active duty military person. Ten years later this ratio had increased to 1.1 dependents for each active duty military person.

Table 6

POPULATION FIGURES AT CAMP LEJEUNE

<u>YEAR</u>	<u>MILITARY POPULATION</u>	<u>CIVIL SERVICE</u>	<u>NAVY HOSPITAL</u>	<u>NON-CIVIL SERVICE</u>
1941				
1945				
1950				
1955				
1960				
1965	35,416	2,898	1,000	1,100
1970	31,287	3,077	1,000	1,100
1975	39,000	2,700	1,000	1,100
1976	40,000 (Jan.)	2,650	1,000	1,100

SOURCE: Onslow County Economic Development Commission

By comparing the growth at Camp Lejeune to the growth of Onslow County, a direct correlation can be found.

The total population of Onslow County in April, 1970, was 103,126 composed of 16,610 (16.1 percent) racial minorities (black and other races) and 86,516 (83.9 percent) whites. The Spanish-American ethnic group, which can include whites, blacks or other races, accounted for 2,713 (2.6 percent) of the population. Onslow County has a comparatively small total minority population of approximately 16 percent.

Table 7

POPULATION BY RACE AND SEX FOR ONSLOW COUNTY
1970

RACIAL GROUP	ONSLow		NORTH CAROLINA	
		% OF POPULATION	TOTAL	% OF POPULATION
Total all races	103,126	100.00	5,082,059	100.0
White	86,516	83.90	3,082,059	76.8
Black	15,180	14.70	1,126,478	22.2
American-Indian	358	0.40	44,406	0.9
Japanese	365	0.40	2,104	0.0
Chinese	45	0.04	1,255	0.0
Filipino	132	0.10	905	0.0
Hawaiian	51	0.05		
Korean	15	0.01		
Other	458	0.40	5,144	0.1

SOURCE: U. S. Department of Labor, Manpower Administration, Summary Manpower Indicators for Onslow County, June, 1972, p. 3, and U. S. Department of Commerce, Bureau of the Census, General Population Characteristics North Carolina, October 1971.

The general educational level of the population needs to be known in order to determine the types of marketable skills which are available in the job market. Information from the 1970 Census Bureau indicates that slightly more than half of all Onslow County residents had completed high school, as compared to an average of 40% for the State of North Carolina.

Table 8
1970 EDUCATIONAL CHARACTERISTICS OF MALES AND FEMALES
TWENTY-FIVE YEARS AND OVER

County	Males 25+ Years Old		Females 25+ Years Old	
	Median School Years Completed	Percent High School Graduates	Median School Years Completed	Percent High School Graduates
State Total	10.8	39.5%	10.3	37.3%
Onslow	12.1	53.1%	12.1	52.2%

SOURCE: North Carolina State Government Statistical Abstract, 1973, p. 149.

A much smaller percentage, only nine percent, of the Onslow County population has graduated from college. Information provided by the Marine Corps Base Education Office revealed that the average officer has completed three years of college while most enlisted men have finished 11 years of their education.

A follow-up survey of high school graduates conducted by the North Carolina Department of Public Instruction showed that almost 60 percent of all the Onslow County 1973 graduates were continuing their formal education beyond high school. Almost forty percent of these students were enrolled in a community college or technical institute. This indicates that Onslow County's population is likely to become better educated in the future.

In 1974, a total of 19,070 students were enrolled in public, private, and parochial schools in grades onethrough twelve. It was estimated that approximately 904 of the 12th grade students would graduate.

Table 9

PERCENTAGE OF POPULATION ENROLLED IN ONSLOW COUNTY SCHOOLS
BY AGE 1960 AND 1970

AGE GROUP	1960	1970
5 & 6 Years Old	45.6%	55.3%
7 & 13 Years Old	97.4%	95.8%
14 & 15 Years Old	91.9%	94.5%
16 & 17 Years Old	48.2%	57.5%
18 & 19 Years Old	7.6%	9.3%
20 & 21 Years Old	4.6%	2.3%
22 to 24 Years Old	2.4%	2.6%
25 to 34 Years Old	1.3%	1.7%

SOURCE: U. S. Census, North Carolina General Social & Economic Characteristics, 1960 and 1970.

ECONOMY

Onslow County has a healthy economy with adequate job opportunities for residents who wish to work. Data about the employment status of the population provides an understanding of our human resources in Onslow County. This foundation is necessary to identify the strengths and weaknesses of the local labor force with an eye toward improving the balance and future of the local economy.

Employment status data for 1960 and 1970 is not directly comparable. In the 1960 census, 14 year olds and above were included as part of the labor force. By 1970 the labor force definition had been altered to include only those 16 years of age and older. According to the Census Bureau, Onslow's labor force includes all persons classified as employed and unemployed, and also members of the Armed Forces. The civilian labor force excludes persons on active duty with any branch of the military service. Because of the presence of Camp Lejeune, Onslow County shows a high total labor force participation rate.

Table 10

ONslow COUNTY EMPLOYMENT STATUS
1969 and 1970

	1960 14 yrs. & over	1970 16 yrs. & over
Total Both Sexes	57,614	73,985
Total Labor Force	38,270	54,548
Labor Force Participation Rate	66%	73.7%
Civilian Labor Force	12,698	18,459
Employed	11,874	17,259
Unemployed	824	1,200
Unemployed Rate	6%	6.5%
Not in Labor Force	18,228	19,437
Inmate of Institution	102	37
Enrolled in School	2,914	2,383
Other Under 65 Years	14,025	15,142
Disabled or Handicapped	*	2,164
Other Over 65 Years	1,187	1,875

* not available

SOURCE: U. S. Department of Labor, Manpower Administration, Summary Manpower Indicators for Onslow County, June, 1972, p. 8. and Onslow County Planning Department and Moore Gardner Associates, Development Potential, October, 1969, p. I-56.

In Onslow County, like the rest of the nation more women are entering the labor force than ever before. In 1960, less than one quarter of the females were participating in the labor market. By 1970 this percentage had increased by more than a third with 8,900 women employed. The overall state female labor force participation rate is 44 percent. Part of the differential may be attributed to a large number of military wives who do not remain in the area long enough to secure employment. Fewer women were reported as being students in 1970 than were enrolled in 1960.

The labor force participation rate for men has increased

slightly by 1% from 1960 (93%) to 1970 (94%) while the unemployment rate for 1970 remained almost stable at 3%. Out of a total male population of approximately 49,000, 46,000 were members of the labor market in 1970. The number of males not participating in the labor force because of school enrollment had decreased by approximately 200 from 1960 to 1970.

The following chart, comparing 1960 and 1970 shows the employment sectors which are increasing and decreasing for Onslow County.

Table 11

TOTAL EMPLOYED PERSONS BY INDUSTRY IN ONSLOW COUNTY
1960 and 1970

	1960	1970
Total Employed, All Industries	11,874	17,259
Agriculture, Forestry & Fisheries	1,489*	889*
Mining	8	17
Construction	900	1,173
Manufacturing	543	1,738
Durable Goods	a	740
Nondurable Goods	a	998
Transportation	293	538
Communications & Public Utilities	226	631
Wholesale Trade	208	370
Retail Trade	2,650	4,240
Finance, Insurance & Real Estate	311	781
Services	2,127	4,549
Business & Repair	289	322
Personal	1,299	1,358
Medical & Health	270	529
Educational	137	1,565
Schools & Colleges	a	1,500
Government	689	1,286
Private	83	214
Other Educational & Related	137	65
Other Professional & Related	132	775
Public Administration	1,589	2,333

^aNot Available

*This figure is incorrect

SOURCE: U. S. Department of Labor, Manpower Administration, Summary Manpower Indicators for Onslow County, June, 1972, p. 12 and U. S. Census Bureau, General Social & Economic Characteristics for North Carolina, p. 35-273.

Table 12

TRENDS IN UNEMPLOYMENT RATE
ANNUAL AVERAGES-1962,1968,1971

COUNTY	UNEMPLOYMENT			
	1962	1968	1971	1975
Carteret	10.9%	6.5%	5.9%	
Craven	5.2	3.7	5.1	
Duplin	5.6	3.8	4.3	10.5
Greene	8.7	6.1	8.0	
Jones	6.1	3.2	8.5	
Lenoir	6.6	5.0	4.9	
Onslow	7.1	5.3	5.6	7.5
Pamlico	9.1	6.2	8.6	
Wayne	6.1	4.1	4.1	
Region	6.9	4.6	5.1	

SOURCE: Onslow County Economic Development Commission

For women in 1970, the major employment sectors were manufacturing (9%), retail trade (27%), and services (39%) which includes teaches and clerical workers. Another 9% were employed by either Federal, State, or local government. Men were primarily employed in the following sectors: construction (12%), manufacturing (10%), wholesale trade (22%), finance, insurance, and real estate (16%), and public administration (17%). In 1960, the largest number of jobs occurred in the following four major industry divisions: services, retail trade, public administration, and manufacturing. Federal, State, and local governments employed 5,188 persons in non-agricultural jobs, 30.1% of the total individuals employed in the county. The Onslow County unemployment rate is inflated by the fact that approximately 800 men are dishcarged from the Marine Corps each month at Camp Lejeune.

Although little information has been included in this analysis which provides a racial breakdown of the labor force, the following maybe of interest.

Table 13

RACIAL COMPOSITION OF THE LABOR FORCE, 1970

TOTAL	18,459	% of Total
White	15,279	82.8
Black	3,058	16.6
Other races	122	0.7
Spanish-Americans	176	1.0

SOURCE: U. S. Department of Labor, Manpower Administration, Summary Manpower Indicators for Onslow County, June, 1972, p. 12.

Unemployment totaled 6.5% of the civilian labor force in April, 1970. Unemployment rates by race and ethnic groups were: white, 6.2%, blacks, 7.6%; other races, 19.7%; and Spanish-Americans, 11.9%.

A major portion of income within Onslow County begins with payrolls. A large share of Onslow County payrolls are from the following five major sources.

Table 14

1975 ANNUAL PAYROLL
ONSLow COUNTY

	<u>Estimated Payroll</u>
1. Camp Lejeune Marine Base	\$244,000,000
2. Industry	\$ 22,000,000
3. Agriculture	\$ 20,000,000
4. Tourism	\$ 12,000,000
5. Seafood Industry	\$ 8,000,000

SOURCE: Onslow County Economic Development Commission

Income levels within nearby counties are not uniform. In 1969 median family incomes ranged from a high of \$7,156 in Carteret County to a low of \$5,400 in Jones County. It should be noted that many of the low income families in the region live on farms which provide the residents with a large percentage of their food.

Table 15

RESIDENT INCOME LEVELS FOR REGION P, NORTH CAROLINA
AND THE U. S., 1969 AND 1970

	1970 PER CAPITA INCOME	1969 MEDIAN FAMILY INCOME
Carteret	\$2,407	17,156
Craven	2,322	7,046
Duplin	1,893	5,710
Greene	1,719	5,554
Jones	1,640	5,400
Lenoir	2,280	7,002
Onslow	2,205	6,471
Pamlico	1,882	5,761
Wayne	1,998	6,354
Region	2,138	6,514
North Carolina	2,492	7,774
United States	3,577	9,590

SOURCE: N. C. Department of Revenue

The following average weekly wage data from the weekly average of total wage payments is divided by average monthly employment, thus reflecting irregular and partial work schedules, season employment, etc. Data should not be confused with actual average weekly pay rates for a standard work week. Wages include overtime pay and salaries to management and supervisory personnel.

Table 16

AVERAGE WEEKLY WAGES PER SELECTED INDUSTRY GROUP

Industry Group	FIRST QUARTER OF:									
	1970		1971		1972		1973		1974	
	N. C.	County	N. C.	County	N. C.	County	N. C.	County	N. C.	County
Total	\$108	\$ 90	\$113	\$ 92	\$124	\$ 94	\$131	\$101	\$140	\$108
Construction	114	109	120	114	127	116	139	111	149	125
Manufacturing	107	83	111	85	124	86	130	92	139	98
Transportation, Commu- nication, & Utilities	136	96	147	105	164	108	176	119	191	128
Trade	103	90	108	93	114	94	120	100	129	105

SOURCE: Employment Security Commission

The major farming regions in Onslow County are found in the area around Richlands, White Oak Township, and to a smaller extent, Sneads Ferry. Information about Onslow County's agricultural economy indicates some trends similar to those noted throughout the state.

Tobacco is the largest money crop. Gross farm income from the major crops--tobacco, corn, and soybeans--has remained fairly stable as the following chart indicates. The dramatic increase from 1972 to 1973 reflects the impact of inflation on farm prices.

The livestock income which is based on hog production has fluctuated more erratically. This may be attributed to the market changes in price per pound. The total number of hogs sold during this period has remained relatively constant. From 1968 to 1972, the number of hogs on farms increased by 14 percent. During the same period, the number of chickens, excluding commercial broilers, decreased by 45 percent due to changes in market operations in which large scale independent chicken

farming came to an end. The number of cattle decreased by 30 percent because of the fluctuation in cattle prices and the fact that grain farming became more profitable than cattle raising.

The livestock and crop income information only includes the major crops. However, the totals reflect other agricultural products of Onslow County, including forest products, peanuts, cattle, poultry and horticulture.

Onslow County is fortunate in that only a little more than 25,000 acres in farm land have been taken out of production since 1951. This represents a decrease of approximately 1,100 acres per year. The decline in farm population during the same period does not represent a decline in the significance of the agricultural sector of Onslow's economy but rather reflects changes in farm methods and equipment. In the early 1950's, tenant farming was still the predominant form of agricultural production in Onslow County. Since then, new and larger machines have become available which replaced the tenant farmer while at the same time increasing farm productivity. The same factor accounts for the increase in the number of people who worked 100 days or more off the farm.

Most of the farming operations in Onslow County are family owned. There is little corporate farming except for the agricultural production carried on at Hofmann Forest. Most farms are approximately 95 acres in size. This can be compared to

the average farm size in 1950 to 67 acres.

Table 17

FARM GROSS INCOME - ONSLOW COUNTY IN MILLIONS

<u>YEAR</u>	<u>CROP</u>	<u>LIVESTOCK</u>	<u>TOTAL</u>
1975	20.4	5.3	25.7
1974	18.6	1.9	20.5
1973	13.9	2.9	20.5
1972	9.8	1.0	12.0
1971	8.3	1.8	12.7
1970	10.1	1.2	16.2
1969	9.0	3.1	17.5
1968	7.8	2.5	15.1
1967	8.9	2.5	15.5
1966	8.6	2.2	14.0
1965	7.1	2.3	12.5
1964	8.7	1.5	15.2
1963	8.9	3.2	13.6
1962	7.0	3.7	11.9

SOURCE: Onslow County Community Resource Development Committee, 1975

Although the long term trend has been a decrease in acreage of cropland harvested, the current year has shown a slight increase.

Table 18

CHANGES IN AGRICULTURAL FACTORS IN ONSLOW COUNTY - 1974-1951

<u>YEAR</u>	<u>ACRES OF ALL LAND IN FARMS</u>	<u>PEOPLE ON FARM TRACTS^a</u>	<u>PEOPLE WHO WORKED 100 DAYS OR MORE OFF FARM</u>	<u>ACRES OF HARVESTED CROPLAND</u>
1974	153,380	*	*	44,147
1973	163,585	*	*	43,535
1972	161,040	*	*	45,548
1971	160,438	6,464	1,617	33,797
1969	161,419	7,099	1,578	35,666
1968	164,556	7,501	1,566	36,994
1967	165,580	7,410	1,547	36,594
1966	165,469	8,038	1,651	35,356
1965	166,909	8,346	1,659	35,685
1964	168,426	9,266	1,485	35,285
1962	170,796	10,437	1,665	36,369
1961	173,035	10,477	1,800	46,052
1951	178,778	10,800	*	49,042

^aA tract is defined as 10 acres or more *Not included in census

SOURCE: North Carolina Dept. of Agriculture, Onslow Co. Annual Land Utilization and Crop Acreages, 1974

One unique facet of the forest industry in Onslow County is the extent of forest land ownership by industrial companies. Forest land ownership maps prepared by the North Carolina Office of Forest Resources with the approval of the major companies indicated that approximately 37% of all the land in Onslow County is owned by industrial users. Of the total county area, 44% is used as forest land. Approximately 7% of the forested area is owned by smaller property owners and, for the most part represents uncleared farm land.

Of the 494,453 acres of land in Onslow County 377,046 acres are commercial forest, 300,094 acres are covered in pines, and 76,952 acres are covered by hardwoods. The paper companies are utilizing the forests of the county well. There are only 152,632 acres understocked; 129,165 acres adequately stocked and 95,249 acres of land stocked to capacity.

Table 19

TIMBER VOLUMES ONSLOW COUNTY

	SAWTIMBER	GROWING STOCK
	Thousands of Board Feet	Thousands of Cubic Feet
All Species	730,546	268,098
Pines ^a	477,608	176,039
Other Softwoods ^b	25,837	6,406
Soft Hardwoods ^c	140,971	57,523
Hard Hardwoods ^d	86,110	28,130

^aLongleaf loblolly, pond, slash, shortleaf

^bCypress, eastern red cedar, Atlantic white cedar

^cBoxelder, red maple, hackberry, loblolly bay, sweet gum, black gum, tupelo gum, yellow poplar, cottonwood, sycamore, blackcherry, willow, elm

^dBirch, hickory, persimmon, beech, ash, holly, black walnut, mulberry, all oaks

County increased by more than 300% from 1965 to 1975. The year-end figures for 1974 reflected the early stages of a recession and were somewhat lower than the growth projection.

Table 20

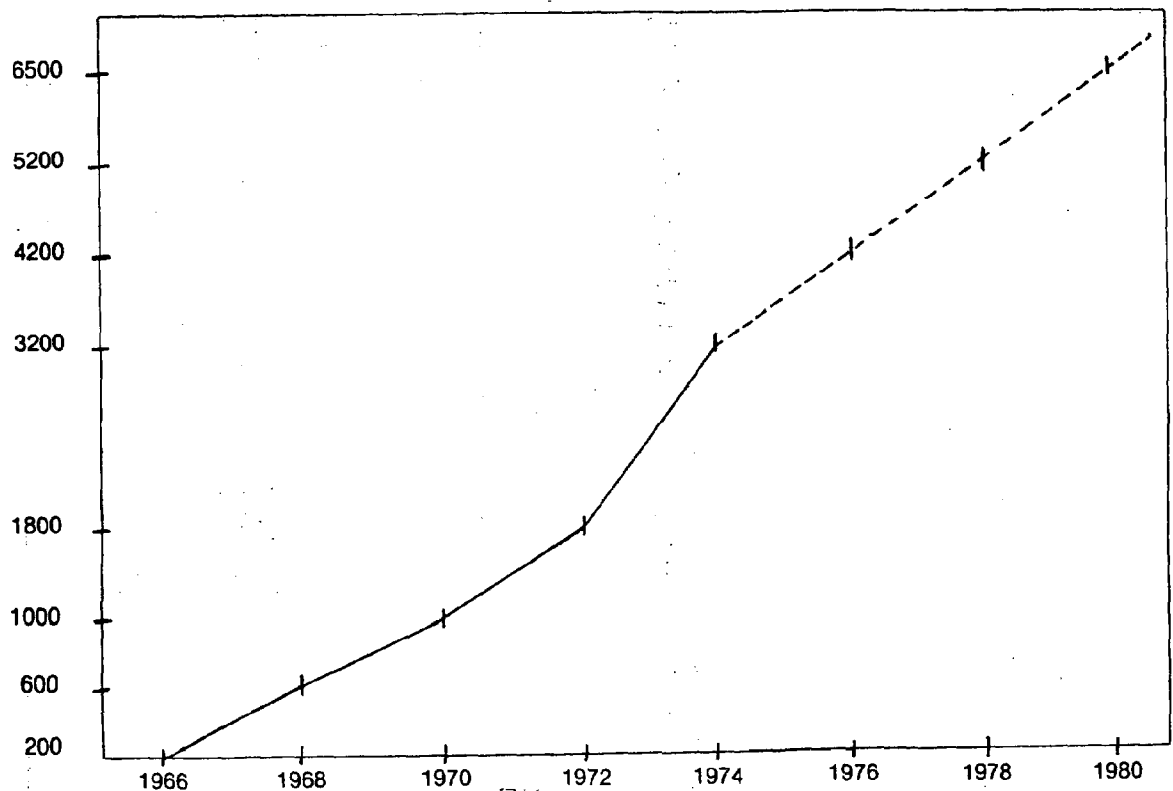
COMPARISON OF LABOR TRENDS IN THE MANUFACTURING SECTOR
ONSLow COUNTY AND NORTH CAROLINA
1950 THROUGH 1990

Year	% of Labor Force Employed In Manufacturing	
	N.C.	Onslow
1950	42%	0%
1960	51%	9%
1970	32%	8%
1975	38%	14%
1980*	34%	18%
1990*	35%	20%

*Projected figures

SOURCE: Onslow County Economic Development Commission, December, 1974.
Table 21

MANUFACTURING EMPLOYMENT IN ONSLOW COUNTY 1966 - 1980



SOURCE: Onslow County Economic Development Commission, Dec., 1974.

Table 22
OCCUPATIONAL CLASSES OF PERSONS SIXTEEN YEARS
BY TOTAL EMPLOYMENT AND PERCENT OF TOTAL
EMPLOYMENT FOR ONSLOW COUNTY

Total	Professional Technical & Kindred	Managers & Administrators (Except Farm)	Sales Workers	Clerical & Kindred Workers	Craftsmen Foremen &
17,259	1,945 - 11%	1,641 - 9.5%	1,399 - 8%	3,055 - 18%	2,561 - 15%

Operatives Except Transport 1,589 - 9%	Transport Equipment Operatives 776 - 4.5%	Laborers Except Farm 860 - 5%	Farmers, Farm Managers, Farm Laborers & Farm Foreman 754 - 4%	Service Workers Includ. Private Household 2,679 - 16%
---	--	--	---	---

SOURCE: North Carolina State Government Statistical Abstract, 1973, pp. 218-219.

Table 23
INDUSTRIAL GROWTH IN ONSLOW COUNTY 1941 THROUGH 1976

Year Established	Product Manufactured	Total Employment
<u>1976</u>		
To be announced	Fuel Injectors	250-1100
<u>1975</u>		
Onslow Herold	Newspaper	25
<u>1974</u>		
Alton Box Board Co.	Paper Tubes	100
Progressive Service Co.	Cutting Dies	35
<u>1973</u>		
Realtronics	Electronic Parts	250*
Supak & Sons	Zip-out Raincoats	200
Verona Packaging Co.	Plastic Utensils	20
Holly Ridge Foods, Inc.	Frozen Pastries	20
<u>1972</u>		
Uniflite	Pleasure Boats	150
<u>1971</u>		
Advance Industries	Mobile Homes	68*
Carter's Packing Co.	Beef and Pork	13
Carper Industries	Artificial Plants	20
<u>1970</u>		
Barrus Construction Co.	Asphalt	35
Maysville Fashion	Clothing	70
<u>1969</u>		
Topsail Veneer Co.	Veneer	38
Del-Mar, Inc.	Clothing	300
Swansboro Garment	Clothing	250
<u>1968</u>		
Richlands Textile, Inc.	Ladies Clothing	400
Martin-Marietta Aggregates	Marl	22
<u>1967</u>		
March Manufacturing	Clothing	100
Weyerhaeuser	Plywood	250

Table 23 (Cont.)

INDUSTRIAL GROWTH IN ONSLOW COUNTY 1941 THROUGH 1976

Year Established	Product Manufactured	Total Employment
<u>1966</u>		
Carolina Meat Processors	Bacon	360
<u>1965</u>		
Thompson Sign Co.	Signs	20
<u>1955</u>		
Daily News	Newspaper	65
<u>1941</u>		
Camp Lejeune	N/A	See Previous Section

*Closed

SOURCE: Onslow County Economic Development Commission, January 8, 1975

Employment in the industrial sector still constitutes a relatively small percentage of total employment compared to other sectors. For instance, Camp Lejeune had approximately 4,000 civilian employees in 1974, 20% more than our total manufacturing employment in 22 firms.

Reflecting the large government population in Onslow County there are ten times more people employed in professional, Technical, and kindred occupations than within Region P. Onslow has only a slightly larger percentage of sales workers and clerical workers. Few, compared to the number in state and region, Onslow County residents are likely to be employed as machine operators. There are substantially few individuals employed on farms in the county than is typical for Region P. There exists within in the county a larger number of service workers than in the state or region. Except for a few categories in the employment profile of Onslow County's labor force there is little difference from the state or nine county planning region.

Retail trade statistics indicate a positive trend in economic growth within Onslow County. Within the County, retail trade is one of our four major employment sectors. Retail sales, exclusive of Marine Corps Base Commissary and Exchange sales, have grown from \$42.2 million in 1956 to \$194.1 million in 1973. The Commissary and Exchange sales were estimated to be in excess of \$65 million in 1975.

During the period from 1967 to 1972, the total number of retail establishments in Onslow County, reporting data to the Census Bureau, increased approximately 10%, and the average number of reported employees in each retail store increased by 11%.

The greater percentage of retail sales occurs in the City of Jacksonville. In 1973, total retail sales in Onslow County equaled almost \$195 million with \$140 million (or 73%) of all the sales occurring in the City of Jacksonville. Retail sales since 1969 have grown at a slightly higher rate county-wide than within the City of Jacksonville. This indicates that the retail market outside of the city limits is becoming more important.

From 1969 to 1973, retail sales in the county increased by almost 54%; the City of Jacksonville grew by approximately 44%. This expansion in retail trade is due to both the increased population and the gain in average personal income.

Table 24

RETAIL SALES IN JACKSONVILLE AND ONSLOW COUNTY - 1969-1975

Year	Jacksonville	% Increase	% of Total Onslow County Sales	Onslow County	% Increase
1969	\$ 97,936,087	a	78%	\$126,492,600	a
1970	105,980,116	8%	77%	138,717,657	10%
1971	108,640,669	3%	73%	147,325,204	6%
1972	122,544,924	13%	74%	167,139,528	114%
1973	140,476,403	15%	73%	194,066,574	16%
1974					
1975					

Note: "a" not computed

SOURCE: Onslow County Economic Development Commission, December, 1974.

Table 25

GROWTH IN RETAIL SALES, NUMBER OF BUSINESS AND
AVERAGE NUMBER OF EMPLOYEES IN ONSLOW COUNTY
1967, 1969 AND 1972.

	1967		1969		1972	
	Total Reporting Units	Average # of Em- ployees	Total Reporting Units	Average # of Em- ployees	Total Reporting Units	Average # of Em- ployees
Retail Trade	352	9	379	8	387	10
Building Materials & Farm Equip.	15	6	13	7	13	8
General Merchandise	27	21	27	21	25	32
Department Stores	2	D	2	D	4	101
Limited Price Variety Stores	9	24	6	D	7	D
General Merchandise Stores, N.E.C.	12	6	14	9	a	a
Food	48	6	47	7	40	8
Grocery Stores	38	7	41	8	34	8
Automotive Dealers & Service Stations	101	7	106	8	110	7
New and Used Car Dealers	14	22	15	21	13	26
Tire, Battery, & Accessory Dealers	12	5	13	6	14	8
Gasoline Service Stations	50	5	56	4	59	4
Miscellaneous Automotive Dealers	16	4	14	5	13	3
Apparel and Accessories	21	6	24	8	28	7
Furniture and Home Furnishings	28	6	25	7	26	8
Furniture & Home Furnishings	20	7	19	8	14	10
Furniture Stores	19	D	16	D	11	13
Eating and Drinking Places	66	8	90	8	88	10
Miscellaneous Retail Stores	46	7	47	7	57	10
Drug Stores & Proprietary Stores	8	14	7	17	10	14

Note: a not listed

D notes figures withheld to avoid disclosure of operations of individual reporting units.

SOURCE: County Business Patterns, 1967, 1969, and 1972.

EXISTING LAND USE

The developed areas of the county include industrial, commercial, residential and recreational lands. These developed lands represent approximately 3% of Onslow County's area. The remaining areas are Camp Lejeune Marine Base, occupying 22%; agricultural occupying 15%; forest, 53%; and water and marshes consuming 8% of the total land area.

There are, according to a March 1975 housing count, 27,274 housing units in the county. This total includes mobile homes and base single family housing. In 1975, there were 289 on-base, owner occupied homes and 4,556 rental units. The location of these units is not know. The total housing figure for the county civilian population is 22,525 units. Further study on the housing situation in the county appears necessary as present available data is not adequate. Subdivisions, either for mobile homes or single family dwellings, are increasing in Onslow County, near Jacksonville, Swansboro, and Richlands. Elsewhere, the development is dispersed farily even in small community type densities.

Approximately 0.1% of the land in Onslow County is used for indutrial purposes. The county is actively recruiting high quality industry. Commercial land occupies 0.12% of the land area of the county. The commercial areas are located primarily along U.S. 17, N.C. 24 and N.C. 258. These areas

developed as commercial are particularly prevalent around entrances to cities, subdivisions, and the Marine Base. In most cases strip commercial causes congestion. In some strip commercial blight is a problem because smaller businesses and residential structures are converted for uses other than that for which they were designed. Both Highways 17 and 24 are prime examples.

The North Carolina Department of Transportation provides the road construction, planning and road maintenance in the county. The Seaboard Coastline Railroad operates a line from Belgrade through the center of the county in Jacksonville to Holly Ridge. The Marine Corps also operates a railroad which connects the base with Cherry Point and Morehead City. The two utility companies, Carolina Power and Light and Jones-Onslow, locate and maintain their own power locations and poles and lines throughout the county. Acreage for transportation use has not been computed.

The United States Marine Corp uses 108,480 acres of federal reservation, Camp Lejeune, which occupies 22% of the total acres of the county. The land, not covered by county jurisdiction, is controlled and utilized completely by the military.

A second large area of the county, not available for development, is an area known as Hofmann Forest. This area which covers approximately ten percent of the county is owned by the North Carolina State University Forestry Foundation.

Churches and schools are dispersed throughout the county occupying only a small percentage of the total acreage.

Onslow County has 15% of its land area used for agricultural pursuits. This figure does not include the commercial forest lands. Farm land is predominant in the Richlands area, the White Oak area, the Sneads Ferry area and scattered throughout the remainder of the county.

Table 26
EXISTING LAND USE TOTALS FOR ONSLOW COUNTY

Agriculture	44,147	Source: <u>Land Utilization and Crop Report of Onslow County 1974</u>
Industry	500	Source: Ron Baker Economic Development
Commercial Forestry	113,726	Forest Statistics for Southern Coastal Plains, U. S. Forest Service Bulletin SE-26, January, 1974.
Camp Lejeune	108,480	Onslow County Statistical Summary 1968
Incorporated Areas	12,096	Onslow County Statistical Summary 1968
Urban or Rural Non-farm	16,000	Onslow County Statistical Summary 1969
Hofmann Forest	53,696	
Commercial	614	512 units from Land Use Survey x 1.2 acres per commercial TMA Corporation estimate
Residential	967	13,815 houses from Land Use Survey x .08 acres per residential lot TMA Corporation estimate
Water	36,864	Onslow County Statistical Summary, 1968
Forest Private	90,163	Forest Statistics for Southern Coastal Plains, U. S. Forest Service Bulletin SE-26, January, 1974.
Other Forest	5,839	
Recreational Land	<u>1,004</u>	Onslow County Totals.
TOTAL ACRES	484,096	

ONSTOW COUNTY PLANNING DEPT. 1975

SCALE: 1" = 2 MILES

LEGEND

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- TRANSPORTATION
- CULTURAL
- RECREATIONAL
- AGRICULTURAL
- FOREST

ONSTOW COUNTY PLANNING DEPT. 1975

ONSTOW COUNTY PLANNING DEPT.

SCALE : 1" = 2 MILES

LEGEND

- [Pattern] RESIDENTIAL
- [Pattern] COMMERCIAL
- [Pattern] INDUSTRIAL
- [Pattern] TRANSPORTATION
- [Pattern] CULTURAL
- [Pattern] RECREATIONAL
- [Pattern] AGRICULTURAL
- [Pattern] FOREST

ONSTOW COUNTY PLANNING DEPT. 1975

ONSTOW COUNTY PLANNING DEPT. 1975

SCALE : 0 - 2 MILES

LEGEND

- [Pattern] RESIDENTIAL
- [Pattern] COMMERCIAL
- [Pattern] INDUSTRIAL
- [Pattern] TRANSPORTATION
- [Pattern] CULTURAL
- [Pattern] RECREATIONAL
- [Pattern] AGRICULTURAL
- [Pattern] FOREST

Map Labels: SWANSBORO, HAMMOCKS BEACH STATE PARK, CAMP LEJEUNE MARINE CORPS BASE, PUNGUT CREEK, HICKORY HILL, JOHNSVILLE, AIRPORT, JACKSONVILLE, AIRPORT, HOLLY RIDGE.

-
- ONSTOW COUNTY PLANNING DEPT. 1975**
- SCALE: 1" = 2 MILES**
- LEGEND**
- RESIDENTIAL
 - COMMERCIAL
 - INDUSTRIAL
 - TRANSPORTATION
 - CULTURAL
 - RECREATIONAL
 - AGRICULTURAL
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- ONSTOW COUNTY PLANNING DEPT. 1975**

ONSTOW COUNTY PLANNING DEPT. 1975

SCALE: 1" = 2 MILES

LEGEND

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- TRANSPORTATION
- CULTURAL
- RECREATIONAL
- AGRICULTURAL
- FOREST

ONSTOW COUNTY PLANNING DEPT. 1975

The major crops in Onslow County are soybeans, corn and tobacco. In 1974, although there was an increase in acreage, the table shows a decrease in tobacco and soybeans due primarily to wet conditions. These crops are the major money crops of the county.

Forest land is the largest land use in the county covering approximately 53% of the area. The great majority of the forest lands are controlled by large timber corporations holding the land for commercial forest production. Some of this land is among the best farm land in the county and could be used for profitable agricultural uses.

Water covers 8% of the total acreage of the County. The ocean fronting areas are divided into three sections: military waterfront, civilian waterfront and the State Parks waterfront. The military waterfront is called Onslow Beach and consists of eleven miles of ocean front shoreline and twelve miles of intra-coastal waterway. Hammocks Beach State Park occupies three miles of ocean front. The civilian ocean front, which has approximately twelve miles of shoreline and thirteen miles of intracoastal waterway and known as West Onslow Beach, contains the greatest portion of ocean front access available to the citizens of the county.

West Onslow Beach

This area of the county is unique by virtue of its island setting. West Onslow Beach is the only beach area of Onslow County which is left open for development. The new bridge has

placed tremendous development pressure on West Onslow Beach. This area will likely experience major land use changes within the coming decade.

Using 1974 aerial photographs flown by the Department of Transportation and supplemented by a windshield survey, an existing land use inventory was made of the beach. The results of this survey are shown in the following table:

EXISTING LAND USES--WEST ONSLOW BEACH

<u>Use</u>	<u>Acres</u>	<u>% of Total</u>
Residential	155.20	4.7
Commercial	26.11	0.7
Undeveloped	749.00	22.8
Wetlands	1,788.50	54.4
Beaches	564.30	17.1
TOTALS	3,282.6 or (5.12 Sq. miles)	100.0%

As can be seen from the table, the majority of the land, 54.4 percent on the beach, is in the Wetlands category; second, is the undeveloped class with 22.8 percent, and third, beach with 17.1 percent. Thus, nearly one fourth of the 5.12 square miles in the planning area are available for future development.

CURRENT PLANS, POLICIES AND REGULATIONS

Transportation Plans

The North Carolina Department of Transportation (NCDOT) has not prepared a transportation plan for Onslow County. There are improvements scheduled for Onslow County within the North Carolina Seven Year Plan. The improvements are shown on the following map. Based upon records of the NCDOT, Western Boulevard is the only highway within the county which is over design capacity. Its design capacity is 9,000 cars per day; the 1975 traffic count for this road was 14,000, an over design capacity of 5,000.

Community Facilities Plans

Onslow County does not have a Plan which describes planned improvements of each of the county's community facilities, but each entity has its own separate plan. The following is a summary of planned improvements.

The seat of any County Government is the Courthouse. The present Onslow County Courthouse was built in 1904. The County Commissioners' Room occupies 333 square feet of the total of 8,340 square feet of the Courthouse. The Register of Deeds Office is located in an office of 788 square feet and has three employees. The Clerk of the Court has 2,013 square feet with eleven employees in an extremely crowded situation. The Board of Elections has two full-time employees in an office containing 350 square feet, and

the District Attorney's office uses 333 square feet for five employees. The remaining space is utilized by hallways and stairs. The upstairs is devoted to the Superior Courtroom, judge's chambers and a jury room. There are plans being drawn for enlargement of this building to include renovations and additions.

In addition to the Superior Courtroom, there are two district courtrooms located on Mill Avenue. A new district court facility is presently in the design phase. This building will be located on the block between Mill Avenue, New Bridge Street and Old Bridge Street and will provide new office space as well as needed courtrooms for the county's heavy court load. The Onslow County Administration Building was formerly the old jail, built in 1912. The first hospital was built in 1939 and presently serves as offices for Social Services, Agriculture Stabilization Conservation Services (ASCS), Soil Conservation Services (SCS), Home Demonstration, Farmers Home Administration (FmHA), Federal Crop Insurance (FCI), County Agent and Civil Defense; although it is much too small to house so many offices. The Courthouse Annex, built in 1935, provides space for the tax offices of the county. Additional office space will be made available for the Department of Social Services and the Health Department in the old hospital, which was built in 1950, and has been renamed the Human Resources Center.

Albert Ellis Airport has a terminal with full jet liner service. Piedmont Airlines provides daily jet service to this facility.

Although the buildings of County Government are old, some are being renovated to meet the needs of a growing county. More space will be required to meet the needs of expanding service agencies. The Public Works Director is in charge of the Public Works Garage, which houses the Solid Waste Program and the Vector Control (mosquito) Program. Four thousand eight hundred (4,800) square feet are devoted to offices and a large repairs garage located on Onslow Pines Road.

The Onslow County Library is presently located within the City Limits of Jacksonville in a rented building. The facilities contain 40,000 volumes. Two branch libraries are located in Swansboro and Richlands. The Swansboro branch has one room of City Hall devoted to library service, and Richlands has the first floor of the old First Citizens Bank. The bookmobile which serves 17 communities, two institutions, two agencies and 155 private homes regularly, is on a three week schedule.

The library system, with new construction and plans for expansion in progress, is improving in the county. The new Onslow County library, located on 3.2 acres of land, is under construction at Doris Avenue. This new building is scheduled to be completed by July 1976. This new building, with space provided for a special children's section, will cost approximately \$300,000 and will have 8,340 square feet of space. With the large

tract of land, expansion is possible. Plans are already drawn for the expansion of the building to create a North Carolina room and additional shelf space for books.

Coastal Carolina Community College has a library facility which is located at the Georgetown campus. This library has approximately 20,000 volumes of general, technical and vocational reading. It is primarily designed for the students of Coastal Carolina Community College. Plans for a new library at the Western Boulevard campus of Coastal Carolina Community College are being considered; construction will likely begin in two years. This proposed building will be two stories high with 20,000 square feet and will have an audio-visual room and extensive microfilm area.

The Marine Corps Base Library System has approximately 50,000 books at three libraries. They also have extensive microfilm libraries. This facility is not open to the public of the county but only to active duty personnel, their dependents and civilians working on base.

The Jacksonville High School Auditorium is the site of two cultural events in Onslow County: the North Carolina Symphony, and the four concerts of the Onslow Community Concert Association. Both of these organizations are non-profit and need larger facilities to meet increased public demand. The high school auditorium has a seating capacity of 1,100 people with 200 additional chairs available for a maximum seating capacity of 1,300 people.

There are twenty-three schools in Onslow County, consisting of five high schools, five junior high schools and thirteen elementary schools. There are two school additions under construction: Morton Elementary and Dixon Elementary. A new junior-senior high school is under construction at Southwest. All schools have a total of 708 classrooms with 60 temporary classrooms. There is also one private school with approximately 250 students in grades K through 12.

High Schools	Student Enrollment (September 1975)	Acres
Dixon High School	459	20.00
Jacksonville High School	1,605	42.87
Richlands High School	645	13.5
Swansboro High School	682	38.90
White Oak High School	<u>1,072</u>	<u>22.59</u>
TOTAL	4,463	137.86
Junior High Schools		
Jacksonville Jr. High	879	16.00
Northwoods Park Jr. High	968	20.40
Swansboro Jr. High	347	
Tabernacle	737	22.59
Texler Jr. High	<u>564</u>	<u>18.50</u>
TOTAL	3,495	77.49

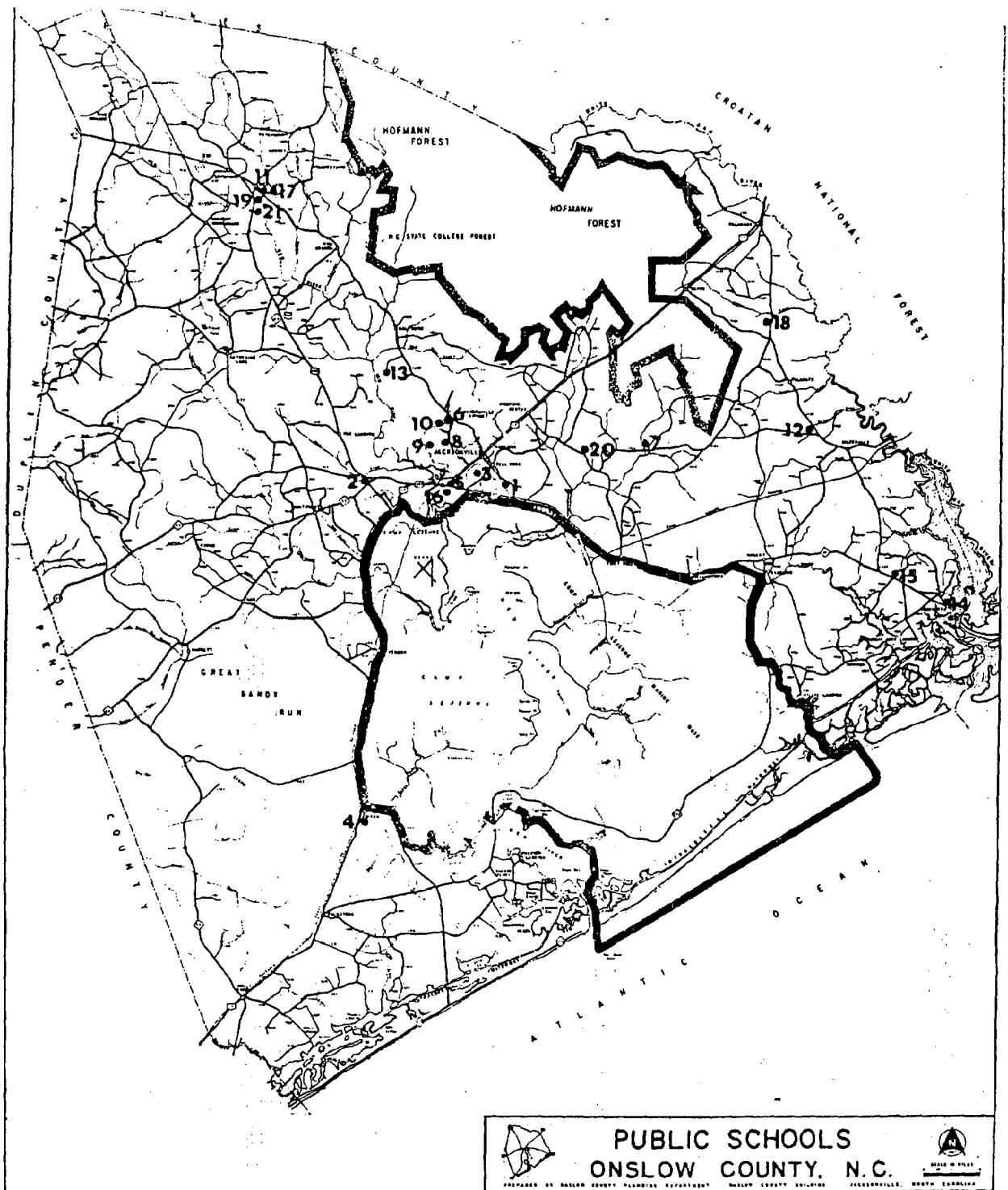
Elementary Schools

Bell Fork Elementary	430	27.00
Blue Creek Elementary	613	26.50
Clyde Erwin Elementary	486	15.68
Dixon Elementary	1,019	23.12
Morton Elementary	669	20.00
Northwoods Elementary	520	15.00
Parkwood Elementary	422	19.76
Richlands elementary	964	13.49
Silverdale Elementary	201	30.00
Summersill Elementary	559	20.00
Swansboro Elementary	430	11.5
Thompson Elementary	538	8.12
Swansboro Middle Grade	431	
TOTAL	7,282	230.17
Total Enrollment	15,240	

Onslow County is unique in that the Marine Corps Base provides school facilities for the dependent of active duty personnel residing on base. Military dependents living off base are attending local schools. This situation creates large in-migration and out-migration of pupils. Therefore, forecasts of enrollment are extremely difficult to predict.

Coastal Carolina Community College is located on a fifty acre campus on Georgetown Road just outside the Jacksonville City Limits. There are four buildings on the Georgetown campus site. Long-range plans show a 75 acre site fully developed campus on Western Boulevard. At present there is a modern classroom building on the new campus and an occupational building under construction.

The enrollment this year, excluding extension courses, is 1,974 students; 1,238 students are full-time students. There are



- | | | |
|--------------------|-------------------------|-----------------------------|
| 1 Bell Fork Elem | 8 Northwoods Elem | 15 Swansboro Hi |
| 2 Blue Creek Elem | 9 Northwoods Park Jr | 16 Thompson Elem |
| 3 Clyde Erwin Elem | 10 Northwoods Park Elem | 17 Trexler Jr |
| 4 Dixon Elem & Hi | 11 Richlands Elem & Hi | 18 White Oak Elem & Hi |
| 5 Jacksonville Jr. | 12 Silverdale Elem | 19 Woodson Elem |
| 6 Jacksonville Sr. | 13 Summersill Elem | 20 White Oak (under const.) |
| 7 Morton Elem | 14 Swansboro Elem | 21 Richlands Hi (prop.) |

46 faculty members and four programs of study: Associate in Arts Degree, Associate in Fine Arts Degree, Associate in Applied Science Degree and Continuing Education. Classes are being held in the old hospital building pending completion of new buildings on the new campus. The campus at present is split, thus the drive across town to different classes creates transportation difficulties.

Onslow County appropriates 3.3% of its total tax levy for support of Coastal Carolina Community College current expenses. Other portions of the \$1,300,000 budgeted for the college are from bonds, revenue sharing money and state grants. The College has programmed \$1,600,000 for fiscal year 1976-77, \$1,900,00 for 1977-78 and \$500,000 for 1968-79..

The development of the Western Boulevard Campus is underway with use of one classroom building. The Vocational Education Building will be next, followed by a Maintenance Building, Library and Student Union, Health-Occupational Building, and Administration Building. Present plans are for the entire school to move to the Western Boulevard Campus; however, the Georgetown Campus can be used if necessary for continuing education.

The Onslow County Mental Health Center has plans for a new building to be located on hospital property. Four hundred and ten thousand dollars (\$410,000) has been budgeted for construction in the fiscal year 1975-76. The proposed area for the new Mental Health Building of 8,800 square feet will be approximately

2.7 acres. The Mental Health Center provides out-patient care for emotional and psychiatric help, alcohol and drug abuse, after care for persons discharged from state institutions, emergency care and programs for the mentally retarded.

The Onslow County Health Department provides medical service for all citizens of Onslow County. The department has clinics which cover all aspects of children's health, family planning and adult health. These services are free and can be extremely beneficial to each individual's health needs.

Located on Camp Lejeune Marine Corps Base is the largest Naval Hospital in the South. This facility provides medical services for the retired military population and for active duty military personnel and dependents.

The Onslow County Sheriff's Department provides the county with an excellent law enforcement program. The Sheriff is assisted by one administrative assistant, four secretaries, four radio operators, eight jailers, two matrons, three narcotic officers, seven criminal investigators, seven civil and process officers, and twenty-four uniformed officers for a total of sixty-one employees. The county recently received a grant for a police legal advisor who started to work on September 1, 1975. There is also an evidence preparation specialist employed by the department. This year the Sheriff's Department has added personnel to the narcotics section through Federal LEAA grants.

The Sheriff's Department is part of a common police communication network which gives the county force the capability of communicating with city, state and federal officers at anytime. This coordinating network provides the county with quicker and more effective police coverage.

The jail itself consists of 14,476 square feet. Part of this space is used for offices and administrative activities; the remainder has sleeping accommodations for 46 males, 11 females, 5 juveniles and one sick or closely watched prisoner. More often than not, the totals exceed the capacity of the facility. The county is concerned about overcrowded conditions, which indicate more jail facilities are necessary.

There are eighteen fire departments in the county. They are all operated by volunteers and partially financed by County Government. The County has just recently purchased one new fire truck for each department. Each department having approximately 30 volunteers per station which alerts its members in their respective area by a central dispatcher in the Jacksonville Fire Department. Onslow County pays the salaries of two city dispatchers to offset costs incurred by the City of Jacksonville.

Eight rescue squads, with approximately 30 volunteers each, provide the county with emergency ambulance service and, like the fire departments, are partially financed by the county. The county has recently purchased an ambulance for each of the eight

units, although some have not been delivered. There is a need for an alert system similar to that of the fire departments. The eight squads are located in their own buildings or in buildings shared with the fire departments in their area.

The Civil Preparedness Department exists to plan emergency action necessary in the event of any type of disaster in the Onslow County area. One thousand two hundred fifty (1,250) square feet of space is devoted to storage of radio, food, water and cots for assistance to the citizens during or after any disaster. The department located in the basement of the Agriculture Building, presently consists of two people and one truck. At present there are 14 public shelters containing food and water for two weeks in the county which can handle 8,320 people.

Trash and garbage collection is provided by ten container sites in the county. Each container site is equipped with two forty cubic yard containers and a raised approach ramp. Currently there are two container trucks in operation. The trucks carry the loaded containers to one of two sanitary landfill sites, maintained at state standards and operated by the Solid Waste section. There are plans for four new container sites increasing the total to 14.

Utility Extension Policies

Onslow County has recently purchased the Brynn Marr Water & Sewer System. This acquisition will provide the new Onslow Memorial Hospital and surrounding areas with "city" water. The county has

already reached an agreement with the city to purchase water at \$.50 per 1,000 gallons to be distributed to customers served by the Brynn Marr System.

The Brynn Marr Water System consists of six wells with approximately 650 gallons per minute pumping capacity. The wells are being shut off as the system converts to water from the City of Jacksonville. Water is stored in a 400,000 gallon elevated storage tank which is also part of the system.

The sewage treatment system is comprised of five pumping stations and force mains pumping 300,000 gallons per day, in two lagoons with a thirty day detention. The outflow from these lagoons is discharged into Northeast Creek. A 15" outfall will connect these lagoons to the city's treatment facility in late 1976. The entire system is being operated by the Brynn Marr Utilities Co., Inc., under contract with the County. Negotiations are underway to have the City of Jacksonville include treatment for this area in the Jacksonville treatment plant. The system is operating at approximately 97% of its capacity and will be expanded to serve adjacent areas.

In 1974, Moore, Gardner and Associates prepared a county water plan for Onslow County. The plan proposes five service districts: Jacksonville, Onslow Beach, Richlands, Sneads Ferry-Holly Ridge and Swansboro.

Within Onslow County there are four 201 Facilities Studies under contract. The four 201 areas in Onslow County are Holly Ridge, Swansboro, Greater Jacksonville and Topsail Island. These four areas were designated by the North Carolina Division of Environmental Management.

The Swansboro area includes the northeastern part of Onslow County and southwestern Carteret County to include Emerald Isle. The Greater Jacksonville area, by far the largest area, covers the City of Jacksonville and areas within an approximate five mile radius. The Topsail Island 201 area also covers a multi-political jurisdiction including West Onslow Beach, Surf City and Topsail Beach. This study is unique in that it deals with an island type of environment. The Holly Ridge Plan covers the City Limits of Holly Ridge.

To implement both the water plan and the 201 plans, special districts will likely be established. One such district exists at West Onslow Beach, where water service is being considered. To pay for the 201 Plans, sewer lines and treatment plants, the local share of 25% will be paid through taxes within the districts. Options open to the public for these purposes are Water and Sewer Authorities, Metropolitan Water Districts (which can include sewer), sanitary districts, and county service districts.

The Northwest Water Association serves approximately 500 customers west of Richlands. The system is at capacity and there are no plans for major expansions.

Other developed areas of Onslow County are presently served by individual wells and septic tanks or small "community" systems which are privately owned. The North Carolina Division of Health Service standard for these systems is being enforced by the Onslow County Health Department. These determinations are guided by the North Carolina Division of Health Service and the Department of Human Resources. There are a few large sewage disposal systems regulated by the N. C. Department of Environmental Management for large mobile home parks and apartments in the County.

Open Space and Recreation

Hunting and fishing are very popular forms of recreation in the county. The large wooded areas of the county provide homes for many different types of animals. The North Carolina Wildlife Commission regulates 28,000 acres of Game Lands in Hofmann Forest. These game lands are open to the public for hunting during specified seasons. Hell and Purgatory Pocosins are two other game areas totaling 717 acres. One hundred acres are available for hunting at the White Oak River Impoundment Game Land, primarily used for waterfowl hunting. Although private land hunting is allowed with proper licensing, there are no game lands located on the coast of the county.

Private hunting clubs are numerous in the county. In Stump Sound Township approximately 46,000 acres are owned by the International Paper Company, about 26,000 acres of which are open to the public for hunting. The Stump Sound Fire Prevention and Hunting Club leases part of the 55,000 acres used by Private Hunting Clubs. Other hunting clubs in this total are Oak Island Hunting Club, Sanders Hunting Club, and the West Onslow Beach Impoundment. The Nine Mile and Back Swamp areas are hunted on private property only. There are several hunting clubs in the Swansboro and White Oak River areas, namely: the Hubert Hunting Club, the Bear Creek Hunting Club and the Rhodestown Hunting Club located in mid-county.

Fishing is of prime recreational consideration in the county. All freshwater streams where licenses are required for fishing are stocked annually by the Wildlife Resources Commission. Water covers approximately 36,864 acres of the county. Salt water sports fishing is readily available on Onslow's ocean frontage.

There is one state park in the county--Hammocks Beach State Park located in Swansboro Township. There are cabins and a recreation building available on the mainland on four acres of land owned by North Carolina Teachers' Association. Just a short boat trip across the inlet to the ocean side are 892 acres of beach island. On the beach side, there are a bath house, picnic areas, a beach house, snack bar, lifeguards and two forest rangers. A passenger ferry is operated by the state to provide transportation

to and from the island. Approximately 18,053 people visited the park in the summer of 1975.

The county has applied for 40 acres of surplus property from the Federal government in the vicinity of Hubert. If this property is given to the county, it will be used for picnic areas and nature trails with more sophisticated development to be programmed at a later date.

The county recreation program currently consists of summer related activities, the recreation director recently becoming a full-time position. The director employs approximately eighteen supervisors for activities throughout the county during the summer months, utilizing school gymnasiums, tennis courts and open areas.

RECREATION FACILITIES OF ONSLOW COUNTY
PUBLIC AND PRIVATE OWNED

	Rich- lands	Jack- son- ville	White Oak	Stump Sound	Swans- boro	Total Onslow County
Ball Field (Lighted)	1	3	2		1	7
Ball Field (Not lighted)	2	5	1	2	1	11
Little League	1	2	3	1		7
Football	1	3	1		1	6
Volleyball		2	4			6
Basketball (Outside)		8	4		12	
Tennis Courts	4	15	4		1	24
Golf	3				3	
Gym	1	4	2		1	8
Playground	2	4	1	1	5	13
Picnic Areas	2	4	1		1	8
Picnic Shelters		5			1	6
Recreation Centers		4				4
Swimming Pools	1	3			1	5
Community Centers	5	3	1	1	2	12
Track		1	1			2
Campgrounds		1	1	4	1	7
Acres Approximate	4	37	9	7	9	66

The Onslow County Board of Commissioners is currently looking into the possibility of a State Park on West Onslow Beach. A track of land is needed for public access to the beach as all the land is privately owned. This proposed park would serve the recreational needs of anglers, swimmers, surfers and boaters of the county and the state.

Prior Land Use Plans and Policies

Onslow has not yet adopted a county-wide Land Use Plan. It has adopted standards for West Onslow Beach and is enforcing those standards through a West Onslow Beach Zoning Ordinance. Zoning is also enforced adjacent to the airport.

LOCAL REGULATIONS

Local regulations are an integral part of sound development within the county. These regulations are designed to guide development decisions which will have long-range benefits to the citizens of Onslow County.

Zoning Ordinance

The Zoning Ordinance in Onslow County was adopted by the Onslow County Board of Commissioners, February 17, 1969. The purpose of the ordinance is to promote the health, safety, and the general welfare of the public by regulating the height, number of stories, size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts and other open spaces, and the density of population. This ordinance applies to West Onslow Beach and the properties surrounding the airport. The enforcement of the ordinance is delegated to the Zoning Enforcement Officer who is appointed by the Board of Commissioners.

If the Zoning Enforcement Officer finds that any of the provisions of this ordinance are being violated, he notifies the person responsible for such a violation, indicating the nature of the violation and ordering the action necessary to correct it. All situations not clearly specified by the Zoning Ordinance are taken before the Board of Adjustment by the Zoning Enforcement Officer.

Subdivision Regulations

Subdivision regulations, which will provide for orderly growth and development within the county, are in draft form.

Building Codes

The North Carolina State Building Code sections pertaining to electrical and plumbing construction is enforced by the county. The purpose of the Building Code is to provide certain minimum standards, provisions and requirements of structure within Onslow County.

Mobile Home Park Ordinance

This ordinance establishes minimum standards governing the construction and maintenance of mobile home parks, utilities and facilities and other physical conditions which ensure that mobile home parks are safe for human habitation.

Septic Tank Restrictions

The Health Department, governed by the Board of Health and regulations from the State of North Carolina, enforces the following standards and policies. Every residence, factory, store, place of amusement, church, school, filling station, garage, or other similar place, or places where human being reside, or congregate, will provide a sanitary method disposing excreta disposal, either in the form of a sanitary pit privy, septic tank, or a sewer connection. Inspections are made for location, construction, and operations of wells for safe consumption of an

adequate supply of drinking water for the public, including taking samples for coliform bacterial counts at citizens' request and annual collection from all public sources of water.

Nuisance Regulations

Nuisance Regulations are enforced as permitted by the General Statutes of the State of North Carolina.

Dune Protection Ordinance

This ordinance was adopted to preserve and promote the protection of the outer banks of Onslow County by maintaining the frontal dunes which provide a protective barrier for adjacent lands and inland waters and land against the action of sand, wind and water.

Sedimentation and Erosion Control Ordinance

A proposed Sedimentation and Erosion Control Ordinance is being studied for adoption in Onslow County. At the present time, the State Sedimentation and Erosion Control Act is enforced by the appropriate state agency in the unincorporated areas of Onslow County. The purpose of the county ordinance is to provide for the regulation of land-disturbing activities, to control accelerated erosion and sedimentation in order that water pollution from sedimentation may be minimized, and to prevent damage to public and private property by sedimentation.

Inland Waterway Wake Control Ordinance

This ordinance is adopted to preserve and protect the inland waterway and the lands, marshes, bulkheads, docks and property adjacent to the waterway.

Onslow County has not adopted Historic Districts Regulations or Environmental Impact Statement Ordinances.

FEDERAL AND STATE REGULATIONS

This information has not yet been provided by the North Carolina Department of Natural and Economic Resources.

PUBLIC PARTICIPATION ACTIVITIES

MAJOR LAND USE ISSUES

Under the planning requirements of the Coastal Resources Commission an identification and analysis must be made of the following major land use issues;

- The impact of population and economic trends.
- The provision of adequate housing and other services.
- The conservation of productive natural resources.
- The protection of important natural environments.
- The protection of cultural and historic resources.

Prior to 1941, Onslow County was a rural county, similar in character to the present day Jones County. The Navy saw the need for an additional major Marine facility in Eastern North Carolina; thus in 1941 Onslow County was chosen for the site of Camp Lejeune. The impact of this event can best be understood when it is compared to a major industry coming to a new area. The base added 40,000 people and 2,650 civilian jobs. Total annual payroll at Camp Lejeune for 1975 was \$244,500,000. Camp Lejeune has placed Onslow County in an economic boom which continues today. In 1930, the county population was 15,289. In 1975, the population was estimated at 113,806. The percentage of increase from 1970 to 1975 was 9% or 1.8% per year. The largest growth period was from 1940 to 1960, an increase of 256% in just twenty years.

The tremendous growth within the county has strained housing conditions, but not as much as would be expected. Camp

Lejeune provides for military housing. Single family houses, apartments and mobile homes are important housing types within the county. Public housing is also provided within Jacksonville and Holly Ridge. Onslow County does not provide public housing.

Productive natural resources within the county include timberlands, mining sites and commercial and sport fishing. Timber production is a valuable resource and plays a major role in the county's economy. Major timber companies in the area include: Weyerhaeuser, Albermarle Paper and Hoerner Waldorf. Although these companies are harvesting timber daily, they are also planting trees for future generations. Another natural resource is the Belgrade limestone quarry at the northern end of Onslow County. The strip mining operation has been discussed earlier in this report.

Onslow County is one of seventeen counties in North Carolina which have a natural resource in commercial and sport salt water fishing. In 1963, Onslow County ranked eighth of the seventeen counties, but only produced two percent of the total commercial catch. In 1968, Onslow County attracted only three percent of the total number of sport fishing trips within North Carolina.

There are two main reasons for Onslow County's low production: (1) A lack of adequate channel depth at New River and Bogue Inlets and (2) closing of shellfishing waters within a portion of New River and White Oak River. The lack of channel depth is causing

boats from Onslow County to seek other ports to land their catch, thereby giving other counties the benefit of the fishing industry that could be available to Onslow. One example of this is the recently found scallop beds located directly offshore from New River Inlet. Boats fishing these beds find it necessary to use other ports because they cannot navigate New River Inlet.

The cities of Jacksonville and Richlands have both recently constructed major sewage treatment facilities, and Camp Lejeune has improved its sewage treatment. The effectiveness of these sewage improvements may already be seen as a result of the increased catch of scallops in Onslow County. In the years prior to 1968, Onslow's scallop catch averaged approximately 400 to 1,000 gallons while in 1968 it jumped to 18,341 gallons. The lack of tropical storms during the last three years and the re-establishment of eel-grass growth in New River has also contributed considerably to this increase of scallops. Onslow County's catch of clams has also increased from 4,831 bushels in 1966 to 8,705 bushels in 1968. Part of this increase can be attributed to clamming by dredging which can yield an average of one hundred bushels per day per boat. Oyster production has declined from 22,855 bushels in 1966 to 8,475 bushels in 1968.

Environmental Protection Agency (EPA) 201 Sewer Facility Plans are being prepared for the City of Jacksonville, the towns of Swansboro and Holly Ridge, Topsail Island and adjacent county areas. Improvements in treatment facilities as a result of these plans are expected to help the commercial and sport fishing industry.

A key natural area within Onslow County is the coastal wetlands. These wetlands extend along the entire twenty-seven miles of Onslow's coastline on both the east and west side of the Intracoastal Waterway. They are protected by the N. C. Department of Natural and Economic Resources and will also be protected under the Coastal Area Management Act.

As important as the wetlands, Onslow's ocean beach is also a natural environment. The beach is under three separate government jurisdictions; the State of North Carolina, the U. S. Marine Corps and County of Onslow. The eastern most Onslow Ocean beach is Bear Island, owned by the State of North Carolina. On this island is Hammocks Beach State Park. Access to the park is provided by a state-owned passenger ferry making several round-trips daily. The island accounts for three and one half miles of ocean frontage. South of Bear Island is the ocean frontage owned by the U. S. government. As the eastern boundary of Camp Lejeune, this parcel is not available for development and accounts for thirteen and one-half miles of ocean frontage.

The only portion of ocean frontage which is open for development is West Onslow Beach. This strip of land extends approximately twelve miles to the Pender County line. A recently constructed bridge for Highway 210 across the Intracoastal Waterway makes the beach easily accessible and will allow for development similar to Emerald Isle. The area is

within an EPA 201 planning area. Public sewage service will encourage the area to grow to an intensity similar to Wrightsville Beach. In providing facilities for sewage treatment, care must be taken to prevent contamination of nearby coastal waters.

ALTERNATIVES

The alternatives for development of Onslow County are put before the citizens in the form of a questionnaire through the county public participation program. In determining development alternatives, the question was asked as to what is liked best about the county. The question was also asked as to what is liked least about the county. Population growth alternatives and level of county service are also surveyed. The following tabulation indicates the desires of the citizens who responded to the questionnaire.

ONslow COUNTY
CITIZEN'S OPINION QUESTIONNAIRE TABULATION
833 RESPONSES

3. Do you live in a: Single-family house 486
 Duplex 20
 Mobile Home 114
 Apartments 97

4a. Do you expect the population of Onslow County to 648 increas
9 decrease or stay the same 68 ?

4b. Would you like the population of Onslow County to 364 increas
55 decrease or stay the same 274 ?

5. Do you feel that different types of land uses such as residential,
commercial, and industrial should be:

557 A. Separated as much as possible
153 B. Allowed to develop without restrictions

6. Do you want additional residential growth in your neighborhood?
290 Yes 370 No Industrial Growth 290 Yes 301 No
Commercial Growth 294 Yes 272 No.

7. What do you like most about Onslow County?

140 Friendly people
96 Beaches
64 home
62 small community
53 location
30 everything
25 climate
25 nothing
22 shopping centers
21 fishing
18 Marine Corps Base
14 farmlands
13 potential growth
11 Clean or unpolluted

7. Continued

8 recreation
8 school system
7 freedom of worship
7 just live here
6 variety of interest
6 forest
6 natural wealth
5 coastal area
4 moderate population
4 undecided
4 convenience
4 low crime rate
4 school system
4 Onslow Memorial Hospital
3 County management
3 open space
3 job opportunity
3 scenic beauty
3 peaceful county
3 health services
3 wildlife
3 recreational facilities
2 care-free living
2 beauty of county
2 river
2 relatively unspoiled
2 Swansboro
2 no large industrial centers
2 coastal region
2 rural area
2 seafood
1 job opportunities offered on Marine Corps Base
1 men helping other people
1 see no immediate advantages
1 school busing system
1 Region P
1 good area to raise children
1 untogetherness
1 good place to make a living
1 water system
1 atmosphere
1 big city atmosphere
1 New River from Richlands to the ocean
1 Sneads Ferry
1 West Onslow Beach
1 Opportunity to serve public
1 availability of education
1 care of elderly
1 City of Jacksonville
1 Easy living
1 White Oak River
1 Opportunity
1 Living on coast
1 Doctors

8. What do you like least about Onslow County?

75 lack of cultural and recreational facilities
58 satisfied with county
53 lack of jobs
46 bad roads
41 crime rate
26 Marine Corps Base
22 low pay
21 lack of law enforcement
20 lack of planning
19 lack of shopping centers
17 tax increase
16 downtown
16 lack of school funds
14 lack of mosquito control
13 lack of industry
11 Management of Social Services
10 litter or trash
10 Pollution
10 local government officials' lack of concern
9 Fire ants
9 overpopulated
9 politics
8 drup problem
8 bars
7 people and climate
6 rent too high for poor housing
6 cost of living
6 traffic
6 poverty
5 lack of consideration for other areas of the county besides Jacksonville
5 lack of public transportation
5 lack of community cooperation
5 Court Street
4 too many mobile homes
4 undecided
4 dilapidated buildings
3 inconvenience
3 more housing
3 electrical service charge is too high
3 lack of preserving historic sites
3 too much emphasis on Jacksonville, recognize other areas of coun
2 bigotry
2 relationship of military to civilian population
2 too commercial
2 water system
2 no county wide zoning
2 fisherman
2 lack of local support for public schools
2 school system
2 attitude of local people toward outsiders
2 lack of zoning

8. Continued

- 1 some of the county agencies
- 1 local government controlling business
- 1 lack of timely development
- 1 too many lawyers
- 1 not enough policemen
- 1 adult entertainment
- 1 discrimination
- 1 okay
- 1 Jacksonville hospital
- 1 no public swimming pool
- 1 behind times
- 1 no four lane highways
- 1 school management
- 1 poor police attitude
- 1 Blue Creek School
- 1 too much involvement with U.S.M.C.
- 1 too many government regulations
- 1 living here
- 1 speeders
- 1 vandalism of private property
- 1 not home
- 1 law enforcement
- 1 not enough doctors
- 1 attitude toward military
- 1 togetherness
- 1 Volkswagon, Inc.
- 1 land drainage needed
- 1 slow pace of progress and change
- 1 hunting
- 1 Equal Opportunity Employment
- 1 People who criticize Marines
- 1 New River Management
- 1 Lack of ecology interest
- 1 no restrictions on dogs
- 1 Real Estate developers
- 1 lack of county beautification
- 1 don't have free Legal Aid
- 1 lack of organization in Sheriff's Department
- 1 don't have doctors in Sneads Ferry
- 1 need more attention at Dixon School in Sneads Ferry
- 1 high bonded indebtedness
- 1 too little restrictions on land development
- 1 keep black and white races separate
- 1 pawn shops selling stolen goods
- 1 lack of dining restaurants and night clubs
- 1 abuse of welfare system
- 1 County management
- 1 outdated laws
- 1 police system
- 1 Onslow County growing too fast
- 1 Dishonest retailers
- 1 condition of beaches
- 1 telephone service
- 1 do not like busing school children
- 1 ocean erosion of land and sea
- 1 County recreational facilities

8. Continued

- 1 Fly-by-night companies
- 1 Support of Coastal Carolina Community College by county officials
- 1 Lack of aid for aged
- 1 Unattractive entrances to city
- 1 Secondary highways
- 1 Lack of liquor by the drink
- 1 Changes should be made in school and kindergarten
- 1 No water and public sewer
- 1 No restrictions on mobile homes

9a. What is your opinion of the level of services provided by the county in the following areas:

	<u>Needs More Attention</u>	<u>Adequate</u>	<u>Needs Less Attention</u>
1. Mosquito Control & Drainage	77%	2%	21%
2. Parks & Recreation	84	1	15
3. Street & Highways	77	1	22
4. Schools	72	1	27
5. Water & Sewer	71	1	28
6. Land Use Planning	75	4	21
7. Industrial Development	73	6	21
8. Air & Water Pollution	67	3	30
9. Environmental Protection	68	3	29
10. Police Protection	62	2	36
11. Libraries	64	4	32
A new public library is under construction and will be in operation by July 1, 1976.			
12. Garbage Collection	54	2	44
13. Fire Protection	46	3	51
14. Rescue & Ambulance	44	3	53

9b. Would you be willing to pay for additional levels of service you feel needs more attention? 422 Yes 215 No

10b. If answer to question above is "yes", please indicate the area that should be protected.

142 beaches
51 water
36 forest
27 marshlands
25 wildlife
9 Swansboro
9 historic sites
8 Sneads Ferry
6 natural environment
4 Chadwick Acres
3 Outer banks
2 Onslow County
2 Wilson Bay Park
2 Belgrade
2 farmlands
2 playgrounds
2 oyster gardens
2 estuary
1 land near inlet
1 Country Club Road
1 roads
1 parks
1 fewer shopping centers
1 rural areas
1 downtown
1 Blue Creek area
1 Marine Corps Base
1 Elizabeth Lake area
1 Save some area near Jacksonville for park
1 White Oak Township
1 develop park along coast
1 Camp Davis
1 Kerr Street
1 Caviness Drive
1 residential areas

11. Additional comments about the Coastal Area Management Act.

11 Need recreational facilities
8 Inadequate water and sewage
7 Stronger enforcement of Zoning Laws
5 Protection of environment
4 does not like CAMA plan
4 CAMA excellent act

7c

11. Continued

- 4 develop other areas of the county besides Jacksonville
- 4 need building code
- 4 poor recreational and cultural facilities
- 3 disappearing public beach property
- 1 more fire protection
- 1 clean up polluted rivers
- 1 more restrictions on mobile home parks
- 1 restore old houses, etc., in original form
- 1 more consideration for commercial fishermen
- 1 preserve nature trails and wildlife
- 1 protect against fire ants
- 1. lack of industry
- 1 need recreation and parks in Sneads Ferry
- 1 Marine Corps war games should be carried on elsewhere
- 1 need more cooperation among military and local government
- 1 stop sewer drainage
- 1 need county-wide zoning
- 1 no drainage or construction on marshlands, creeks or rivers
- 1 shrimping should only be allowed periodically
- 1 check drainage ditches
- 1 protect grave sites
- 1 neglect of Georgetown, no recreation facilities, bad roads, etc.
- 1 Onslow County should remain farming and fishing community
- 1 duplication of rescue squads
- 1 need for adequate rental housing

Every respondent did not answer each question, therefore, the total answers to a single question may not equal the total number of responses. Of those responding to the questionnaire, fifty-eight percent live in single family homes, fourteen percent lived in mobile homes and fourteen percent lived in multifamily structures. Eighty-nine percent of the respondents expect the population to increase. When asked if a population increase for the county was desired, over half, fifty-three percent of the responses to this question thought a population increase was desirable. Forty percent would like the population to remain the same while eight percent preferred a population decrease. For question five regarding a separation of land uses, seventy-eight percent desired a separation of commercial, industrial and residential land uses. Twenty-two percent of the respondents felt that development should be allowed without restrictions on location. Most did not want additional residential or industrial growth within their neighborhood, but, surprisingly, fifty-two percent stated that they desired additional commercial growth.

When asked what was liked most about Onslow County, nineteen percent stated that they liked the friendly people, while thirteen percent liked the beaches; twenty-nine percent singled out recreation and/or location. From these responses, recreation amenities appear to be the county's major asset.

The citizens were also asked what they liked least about the county. Of the responses to this question, eleven percent indicated a need for additional cultural and recreational facilities, seven percent desired additional job opportunity, seven percent wanted the roads in the county improved, and six percent did not like the county's crime rate.

Question nine dealt with the quality of services provided to the residents of the county. In general, improvements were desired for all county services, with parks and recreation facilities receiving the highest rating for desired improvements. Fire protection, rescue and ambulance services were considered by the respondents to be more than adequate. The respondents also showed fiscal responsibility as two-thirds were willing to pay for desired improvements in county services.

The citizens were also asked what areas of the county should be protected. Eighty percent indicated that beaches, water or river, marshlands, forest and wildlife should receive some degree of protection.

The public participation program at West Onslow Beach was composed of citizen opinion survey mailed to all property owners on the Beach whose names and addresses were available from the county tax offices. The results of this survey are summarized on the following table. As can be seen from the following summary, most of the 121 people responding to the

survey would like to see the population of the beach increase slightly but only in single-family residential housing (except mobile homes) served with water and sewer facilities.

Most people would like to have more open space and recreational land on the beach but would not support an increase in taxes to pay for it, except in some cases for mosquito control. If more public funds are to be spent, the respondents felt that top priority should be given to water and sewer facilities, garbage collection and fire and police protection.

Respondents who would like to see the population of West Onslow Beach:

increase greatly	24
increase slightly	52
decrease greatly	3
decrease slightly	4
stay the same	27

Respondents who would like to see more of the following types of development:

single family housing	93
apartments	16
condominiums	24
mobile homes	16
commercial	23
public open space	50
public recreation facilities	70

--Respondents that would support land use regulations for development-36

--Respondents that would not support land use regulations for development-11

--Respondents that would support an increase in taxes to pay for public open space-35

--Respondents that would not support an increase in taxes to pay for public open space-53

--Respondents that felt public funds should be spent for:

	<u>More</u>	<u>Less</u>
water and sewer	88	3
garbage collection	72	6
fire and police	65	4
schools	19	16
parks and recreation	35	14
local planning	37	12
roads or public transit	40	14
environmental protection	50	15

--Respondents that felt development should be permitted in:

	<u>Never</u>	<u>Seldom</u>	<u>Frequently</u>	<u>Always</u>
lands near inlets	35	21	12	10
beaches	15	15	26	25
marshes	44	12	13	9
dunes	52	10	14	10
inland waterways	11	12	16	24

The Citizens Advisory Council produced a list of sixteen items which it considered development related problems. According to the council, Onslow County needs to provide:

1. Regulations which provide home buyers with information that shows if water and sewer are available. It is felt that often people have purchased lots not knowing whether or not the land is capable of supporting human habitation either through water availability or sewage disposal.

2. County zoning was felt to be needed through the county. The purpose of such zoning would be to specify which land use best suited to provide orderly growth within the county.

3. Aerial photographs and detailed topographical maps are out of date or nonexistent in Onslow County. The aerial photography needs to be updated every few years. Detailed topo maps

would assist in analysis of individual sites for any type of land use. A detailed soil survey is also needed.

4. County-wide water and sewer has moved forward by recent acts of the county and city governments.

a. County has purchased Brynn Marr Utility system with water purchase agreement executed with city. Vault and connection located on Bell Fork Road.

b. City has agreed to sell county 500,000 gallons per day at 50 cents per thousand.

c. City has agreed to accept 200,000 gpd of sewerage at the Ellis Boulevard lift station for a fee to be negotiated.

d. City has agreed to sell county an additional 500,000 gallons of water per day at a price to be negotiated.

e. A 12 inch water line is being constructed now from Highway 258 to the new Southwest Junior High School; school will use package sewerage treatment plant.

f. City has extended water and sewer to a lift station beyond the FCX on 258 to serve Triangle property.

g. County has agreed to provide water to those areas covered in the Piney Green - Brynn Marr Service district as outlined in the G. Reynolds Watkins 201 Facilities Plan.

h. Step II Design Drawings are in process on the Greater Jacksonville Area, including upgrading the Jacksonville sewage treatment plant to a 4.3 million gallons per day regional plant.

5. Stream quality needs improvement.
6. Inlet erosion needs to be stabilized
7. A demolition program for outdated buildings appears necessary.
8. Onslow County needs to adopt a minimum housing code.
9. County sponsored affordable housing is desirable.
10. Effective regulations for the maintenance of cemeteries need to be provided. Some of the cemeteries are falling into dilapidated conditions.
11. Drainage in Onslow County has long been a problem. The County operated Mosquito Control Program is improving drainage conditions.
12. The Marine Corps Base has been helpful in providing statistical support and occasional manpower aid to the county. Additional assistance would be helpful in remedying problems such as drainage, water and sewer related problems, solid waste disposal projects, and land management activities.
13. Recreation improvements are felt to be an area where greater attention is needed; a recreation plan for the county could provide assistance in establishing a more balanced recreation program within the county.
14. One particular problem voiced numerous times at all of the citizen meetings was the need for public access to the ocean at West Onslow Beach. The solution to this problem was voiced to

be a state park at West Onslow Beach. Presently, when a visitor to the ocean parks his car on the side of the road, he must trespass to gain access to the ocean. A public park would alleviate this problem and would help property owners by eliminating traffic across their dunes. Parking problems and dune protection could also be solved by such a park.

LAND USE OBJECTIVES, POLICIES, AND STANDARDS

The summary of all of the issues presented by the responding citizens, the Citizens Advisory Council and the Planning Board includes issues of population and economic trends, county services, such as housing, water and sewer, the conservation of natural resources, protection of natural environments and protection of cultural and historic resources and was used in developing land use objective policies and standards.

By all three advisory groups, population is expected to increase. Growth or no growth was discussed, and growth was the clear choice. All of the population figures were approved by the advisory boards. In order for the population to increase as the population projections suggest, provisions need to be made for the increase of 16,000 people in the next ten years. These provisions should include housing, water and sewer, employment, recreational areas and transportation.

Directly related to the population increase is the economic impact on the county. New jobs will need to be created to absorb the approximately 16,000 new residents. This increase alone will stimulate the economy, but will need an expanded job market to employ the working people, the result of the increase. The Marine Corps Base job market cannot be expected to absorb all these people. From present estimates, the base population has

stabilized barring any unforeseen war. There has also been a freeze placed on new positions becoming available on the base in a civilian capacity.

County services are expanding to account for this desired population increase. All natural resources of the county, need to be conserved. Beaches and streams, which need to be kept clean and pollution free, are considered by the advisory boards as areas of vital concern.

Mineral sites, few of which are economically feasible to extract at this time, are present in the county. Care should be taken to identify properly new sites so that the state can help locate future mineral wealth.

The ocean and rivers are playgrounds for all the county to enjoy. Due consideration should be given to insure their longevity as development and growth occur. Poor drainage, unwise sewage disposal and industrial pollutants present problems for the protection of our water resources.

The cultural and historical resources can best be summed up as the preservation of the rural atmosphere which makes Onslow County such a delightful place in which to live. The historic points of interest need to be noted and some provision made for their preservation. These historic sites are, however, very small and most are identified by local historic markers.

A. Goal - Land Use Planning

Objective: To make our county a place where people can live, work and plan under the best conditions possible by providing sound environmental and developmental decisions, that will enable maximum services to be provided at a minimum cost.

B. Goal - Commercial Growth

Objective: To make commercial areas conveniently accessible to other areas, preventing intrusion on residential neighborhoods, encouraging aesthetics in buildings, maintaining efficient traffic patterns, and promoting a diversification of activities.

C. Goal - Industrial Growth

Objective: To encourage additional industrial development and promote a rapid expansion of industrial activities that will offer additional job opportunities and a diversified economy.

D. Goal - Agricultural Growth

Objective: To promote the development of self sustaining farming activities by protecting productive farmland and by promoting farm product markets.

E. Goal - Commercial Fishing Growth

Objective: To encourage the development of seafood processing and marketing facilities, to continue to promote the improvement of the channels of our inlets and of our access areas to the estuarine area, and to promote the development of additional docking facilities along our coast.

F. Goal - Community Facilities Provision

Objective: To maintain or enhance existing facilities, including all government buildings; and to plan for new ones to accommodate future growth, in order that all citizens be properly served by these facilities.

G. Goal - Utility Growth

Objective: To promote the development of water and sewer facilities that will assure the proper removal and disposal of storm water, sewage, and solid waste.

H. Goal - Economic Growth

Objective: To work towards establishing a more diversified and balanced economy in order to provide more job opportunities and to make job training available.

In order to accomplish the goals and objectives of the people of the county, certain programs and studies need be undertaken for providing the best means for attaining these goals.

All available technical resources should be utilized to accomplish the goals of environmentally sound land use. Decisions should be based on soil studies, expected population requirements, and building or agricultural uses of the land. Land is a commodity which is irreplaceable and, therefore, consideration should be given to best use of land consistent with community needs and desires so that these specified land uses can provide for functional and orderly growth.

I. Residential land should provide:

1. Good drainage
2. Safety from flooding
3. Accessibility to community facilities
4. Acceptable population concentrations
5. Adequate water and sewage facilities
6. Acceptable soil quality
7. Protection from conflicting land uses
8. Good design standards
9. Minimum conflicts with other land use

II. Commercial land should provide:

1. Proximity to population
2. Adequate water and sewage facilities
3. Drainage
4. Roads - Transportation (parking facilities)
5. Safety standards
6. Access to utilities
7. Flood protection
8. Good soil quality
9. Waste disposal

III. Agricultural land should provide:

1. Good soil quality
2. Accessibility to markets
3. Good drainage
4. Accessibility to roads
5. Adequate water and sewage facilities
6. Proper waste disposal

IV. Industrial land should provide:

1. Good work force proximity
2. Basic utilities and adequate water and sewage facilities
3. People's good will
4. Adequate treatment of industrial waste
5. Access to natural resources
6. Access to transportation
7. Acceptable soil quality

V. Recreation land should provide:

1. Appropriate setting
2. Proximity to population
3. Good landscape design
4. Soil quality
5. Safety standards with regard to location
6. Flood protection
7. Water and sewer
8. Drainage
9. Accessibility to roads
10. Proper utilities

Some of the basics for land use control measures are detailed soil survey, drainage plan, topographic mapping and updated aerial photography. From these basic studies and materials, the County Planning Program can better assist the county in its long range goal of quality growth.

Other studies which could also be of great benefit are studies for housing needs, recreational planning, capital improvement budgeting and office space study updates.

The Board of County Commissioners delegated the responsibility for preparation of the Land Use Plan to the Onslow County Planning Board and the Citizens Advisory Council for which the County Planning Department provided technical assistance.

The Planning Board has helped with recommendations of Interim Areas of Environmental Concern (IAEC) designation, goal formulation, discussions of land use problems and suggestions concerning citizen participation.

The 42 member Citizens Advisory Council held ten meetings to discuss all aspects of the Land Use Plan. This large group divided into committees to discuss the subject areas of community problems, AEC's and citizen participation. Excellent ideas were presented for incorporation into the Plan.

In an effort to reach every citizen in Onslow County, an opinion survey was distributed in a local paper. This paper was distributed to 21,000 residences throughout the county. Civic clubs, the county libraries, volunteer fire departments, and the Citizens Advisory Council were all contacted and asked to help to distribute forms. The major return on the questionnaires came via assistance by the Region P Human Development Commission. This group used a personal interview technique to get people to fill out the questionnaires. A total of 833 questionnaires have been returned to date, representing approximately one percent of

the population. A sample questionnaire is included in the appendix.

Local news media also helped to increase the awareness of the public to the Coastal Area Management Act (CAMA). The newspapers of the county have provided excellent coverage of all meeting concerning CAMA. A local radio station provided free air time to help promote questionnaire distribution. In addition to the commercial media, all the pamphlets provided by the Coastal Resources Commission and one prepared by the Onslow County Planning Department have been available from the libraries, the Planning Department and several other places throughout the county.

The survey showed a good cross section of county opinion because the responses were almost even for the different townships.

CONSTRAINTS

PHYSICAL LIMITATIONS

The Coastal Resources Commission has not yet designated the Areas of Environmental Concern. Because this designation has not yet taken place, it is not known what areas within the County will be designated. Based on the descriptions within the Planning Guidelines, the following areas within the county are potential Areas of Environmental Concern.

	<u>Ltr. Code</u>
Coastal Wetlands	CW
Low Tidal Marshland	
Other Coastal Marshlands	
Estuarine Waters	EW
Resource Areas-Watersheds or Aquifers	
Small Surface Water Supplies	WS
Special Aquifer Areas - Outer	
Banks and Barrier Islands	SA
Fragile, Historic or Natural Resource Areas	
Existing National or State Parks	PK
Complex Natural Areas	NA
Areas that Sustain Remnant Species	RS
Areas Containing Unique Geologic	
Formations	GF
Historic Places	HP
Registered Natural Landmarks	NL
Areas Subject to Public Rights	
Certain Public Trust Areas	PT
Natural Hazard Areas	
Sand Dunes Along the Outer Banks	SD
Ocean Beaches and Shorelines	
(on the Outer Banks)	OB
Coastal Flood Plains	CF
Excessive Erosion Areas	
Coastal Inlet Lands	IN
Ocean Erodible Areas	OE
Estuarine, Sound and River	
Erodible Areas	SE

These areas are not mapped within the plan because the boundaries are subject to change pending designation by the Coastal Resources Commission. Each of the potential Areas of Environmental Concern are given a detailed description within this section. Appropriate land uses are listed for each.

HAZARD AREAS

Coastal Flood Plains (Potential AEC)

Coastal floodplain is defined as the land areas adjacent to coastal sounds, estuaries or the ocean which are prone to flooding from storms with an annual probability of one percent or greater (100 year storm). These areas are analogous to the 100 year floodplain on a river. Appropriate land uses within the area are those which can be protected from major flood damage by elevation or flood proofing.

Excessive Erosion Areas - Coastal Inlet Land (Potential AEC)

Coastal Inlet Lands are defined as the natural zone of migration of coastal inlets. Such a zone covers all areas that are expected to be eroded by future inlets and inlet migration based on the best available data and studies, including relevant historical photography, surveys, maps and other appropriate information. The particular location of the inlet channel is a temporary one, as such channels are subject to extensive migration. Coastal inlet lands are extremely dynamic land areas that are highly sus-

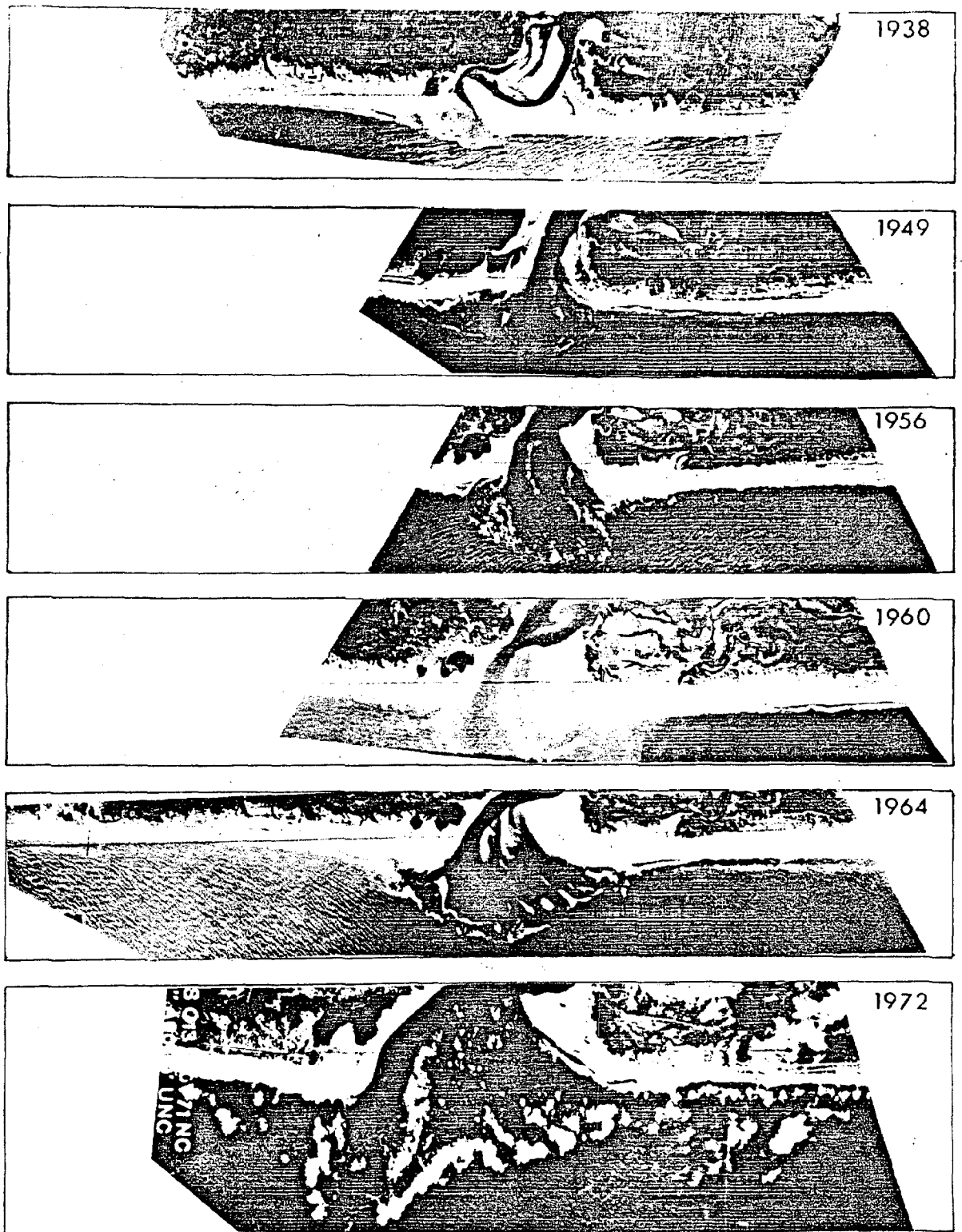


APPROXIMATE SCALE: 1" = 3333' (1972: 1" = 2000')

BROWN INLET

Plate 10-18

Source: Department of Natural and Economic Resources



APPROXIMATE SCALE: 1" = 3333'

NEW RIVER INLET

Plate 10-19

Source: Department of Natural and Economic Resources



1938



1949



1956



1960



1964



1972

APPROXIMATE SCALE: 1" = 3333' (1972: 1" = 2000') 102

BEAR INLET

Plate 10-17

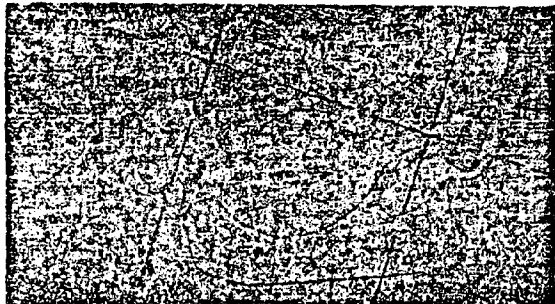
Source: Department of Natural and Economic Resources



FEB , 1871



FEB 10 , 1964



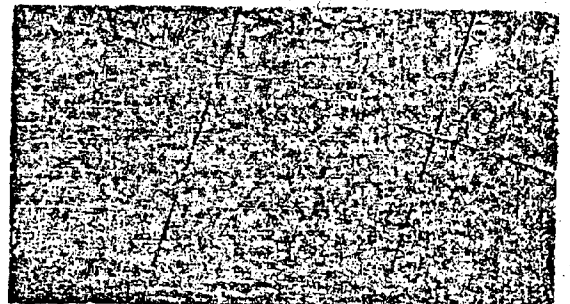
AUG , 1927



OCT 4 , 1970



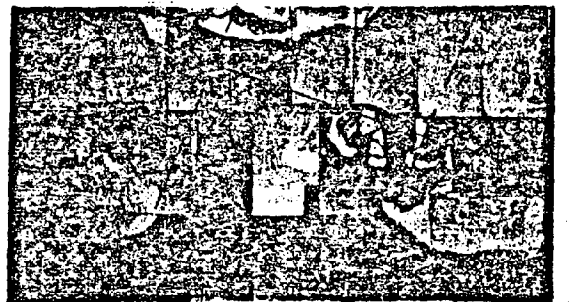
APR 25 , 1938



USGS QUAD 1971



DEC 2 , 1953



SEP 6 , 1973



NOV 12 , 1958

BOGUE INLET ... 100 YEARS

0 2000 8000
SCALE IN FEET

Prepared by the

N.C. Division of Commercial and Sport Fisheries

ceptible to becoming completely displaced by water. Appropriate land uses are recreational or conservation activities and easements for access represent the preferred land use. Moveable temporary structures for recreational purposes may be appropriate. Permanent or substantial residential, commercial, institutional, or industrial structures are not appropriate uses in coastal inlet lands. The following photographs show the dynamic nature of the county's inlets.

Ocean Erodible Area (Potential AEC)

Ocean erodible areas are defined as the area above mean high water where excessive erosion has a high probability of occurring. These areas are extremely dynamic lands, highly susceptible to becoming completely displaced by water. The major objective is to limit unnecessary hazards to life or property or unreasonable requirements for public expenditures to protect property or maintain safe conditions. Open space recreational and fishing piers are appropriate land uses within Ocean Erodible Areas.

Estuarine and River Erodible Areas (Potential AEC)

These areas are defined as the area above ordinary high water where excessive erosion has a high probability of occurring. In delineating the landward extent of this area, a reasonable 25-year recession line shall be determined using the best available information. The estuarine and sound and river erodible areas are natural hazard areas, especially vulnerable to erosion. Development

within this AEC is subjected to the damaging process of erosion unless special development standards and preventive measures are employed. Permanent or substantial residential, commercial, institutional or industrial structures are not appropriate uses in estuarine and sound and river erodible areas unless stabilization has been achieved along the affected reach. Recreational, rural and conservation activities represent appropriate land uses in those erodible areas where shoreline protective construction has not been completed.

SOILS

The soils of Onslow County have been evaluated by soil scientist, of the Soil Conservation Service, U.S. Department of Agriculture. The first major report in soil classification was published by the U.S. Department of Agriculture in 1921. It had very little to say about soil suitability for urban development. However, since 1923, a number of other soil investigations have been made by the U.S. Department of Agriculture for Onslow County. These studies also added a suitability classification for home sites, rating them for septic tank disposal systems, agriculture, recreation, and forest. It also indicated some of the limiting properties of the soils which would tend to limit urban development, such as high water table, lack of drainage, flooding,

etc. The general topographic position for each type of soil was listed.

The following chart is a summation of the soil classifications that have been made in Onslow County, illustrating the various characteristics found in the county's soil system.

The classification of each soil type is listed as a soil association. Each soil association has distinctive proportional patterns of soils. It normally consists of one or more major soil and one minor soil and is named for the major soil. Soils in one association may occur in another, but in a different pattern.

The generalized soil map, published in 1923, by the U.S. Department of Agriculture is intended for broad planning purposes only. It is not entirely suitable for individual farm planning or for planning building site locations. This is because of the differences in soil characteristics within an association. The different characteristics, such as the high water table, the drainage, soil texture, if any, affect the use and management of each soil. The soil interpretations shown in the chart are based on a generalized soil map. The purpose of this table is to show limitations for urban development; only a small percentage of the county has been classified as good for urban development. The table also reveals that most of the soils

APPENDIX C

Soil Interpretations
General Soil Map
Onslow County, N.C.
June, 1970

LIMITATIONS FOR

SUITABILITY FOR

Onslow County, N.C. June, 1970				Dwellings with							
Soil Associations				Sewerage Systems	Septic Tank Filter Fields	Light 1/ Industries	Roads & Streets 2/	General Agriculture	Woods		
<u>Soils</u> % in Assoc.											
1. Rains-Lynchburg-Goldsboro 15% of County	Rains Lynchburg Goldsboro	25 20 20	Sev (Wt) Mod(Wt) Silt	Sev(Wt) Sev(Wt) Mod(Wt at 2.5')	Sev(Wt, Cor) Mod(Wt, Cor) Mod(Cor)	Sev(Wt) Mod(Wt, TSC) Silt	Fair to Good Good Good				
2. Kenansville-Dragston 20% of County	Kenansville Dragston	40 20	Silt Mod(Wt)	Silt(Lfa) Sev(Wt)	Silt Mod(Wt, Cor)	Silt Mod(Wt)	Fair Fair to Good				
3. Portsmouth-Torhunta 10% of County	Portsmouth Torhunta	30 30	Sev(Wt)	Sev(Wt)	Sev(Wt, Cor)	Sev(Wt)	Fair to Good				
4. Leon-Lynn Haven 10% of County	Leon Lynn Haven	70 10	Sev(Wt, Prod)	Sev(Wt, Lfa)	Sev(Wt, Cor)	Sev(Wt, TSC)	Poor				
5. Johnston-Bibb 10% of County	Johnston Bibb	50 20	Sev(Fl, Wt)	Sev(Fl, Wt)	Sev(Fl, Wt)	Sev(Fl, Wt)	Poor				
6. Craven-Lenoir 5% of County	Craven Lenoir	35 30	Mod(Wt, Sh-Sw) Sev(Wt, Sh-Sw)	Sev(Perc) Sev(Perc, Wt)	Mod(Sh-Sw, Cor) Sev(Wt, Sh-Sw, Cor)	Mod(TSC, Er) Sev(Wt, TSC)	Fair to Good				
7. Ponzer-Pamlico 10% of County	Ponzer Pamlico	45 30	Sev(Wt)	Sev(Wt, Sh-Sw)	Sev(Wt, Traf, Cor Sh-Sw)	Sev(Wt, TSC, Sh-Sw)	Poor				
8. Onslow-Lumbee 15% of County	Onslow Lumbee	35 30	Silt Sev(Wt)	Mod(Wt) Sev(Wt)	Mod(Cor) Sev(Wt, Cor)	Silt Sev(Wt)	Good Fair to Good				
9. Tidal Marsh-Coastal Beach 5% of County	Tidal Marsh Coastal Beach	60 40	Sev(Fl, Wt) Mod(Prod, AWC)	Very Sev(Fl, Wt) Silt(Lfa)	Very Sev(Fl, Wt, Cor, Sh-Sw) Mod(Prod)	Very Sev(Fl, Wt, Cor, Sh-Sw) Mod(TSC)	Unsuited Unsuited				

in Onslow County present moderate to severe limitations to residential development, depending on septic tank requirements and filter fields for septic tank disposal systems.

Soils in Onslow County have a definite effect on urban development. Generally, Onslow County soils present limitations to urban development in areas not served by community water and sewer systems. High water tables, low filtering action, and serious drainage problems present, in relatively densely populated areas, the possibility of spoiled wells and surface runoff of effluent. The Southwest Sanitary District areas have already experienced some of these problems. Because of the general nature of soils information in the county, three categories were established to provide at least an overview of the counties soil situation.

A. No Severe Limitations: The soils are the better soils in the county. The water tables are well below the surface, and the soils have good drainage characteristics.

B. Moderate Limitations: The water tables are higher than the first category, yet not as bad as the severe limitations. The soils are characterized by poor drainage and soil composition.

C. Severe Limitations: The soils are soils which would cause numerous problems if development should occur on them. This is not to say, however, that development cannot occur on

the soils. Special building techniques must be utilized to build on these types of soils to prevent loss of money and property.

The category which shows the greatest hazards for foundations and has shallow soils is the severe limitations category. In this category are Portsmouth-Torhunta, Johnston Bibb, and Ponzer-Pamlico soils.

In addition to the severe limitations category, the poorly drained soils of the county include the moderate limitations category. This category includes the soils of the Craven-Lenoir, Tidal Marsh, Coastal Beach, Rains Lynchburg-Goldsboro, Leo Lynnhaven and Onslow-Lumbee types.

The following are Onslow County areas, their soil classification, and relationship to septic systems.

Swansboro Township

Majority area: Onslow-Lumbee, Leon-Lynnhaven, Coastal Beach (Moderate Limitations), Tidal Marsh (Severe Limitations) small area north of Queens Creek, Johnston-Bibb (Severe Limitations) small area at Bear Creek, and Ponzer-Pamlico (Severe Limitations)

White Oak Township

Majority area: Craven-Lenior and Onslow (Moderate Limitations) north boundary and central portions and Johnston-Bibb (Severe Limitations)

Sneads Ferry

Leon-Lynnhaven, Onslow-Lumbee, Coastal Beach (Moderate Limitations), Kenansville-Dragston (No Severe Limitations); Low marsh areas, Johnston-Bibb; (Central and North Central Area. (Severe Limitations)

Stump Sound

Central area: Ponzer-Pamlico (Severe Limitations) includes low swamp areas, Kenansville-Dragston: (No Severe Limitations)

Richlands Area

Majority area: Rains Lynchburg Goldsboro (No Severe Limitations) Airport area, Kenansville, Dragston (Slight Limitations); Intermingled areas, Johnston-Bibb (Severe Limitations) Jacksonville Township: Combination Rains Lynchburg Goldsboro (Moderate Limitations) Johnston-Bibb (Severe Limitations) and Kenansville-Dragston (Slight Limitations)

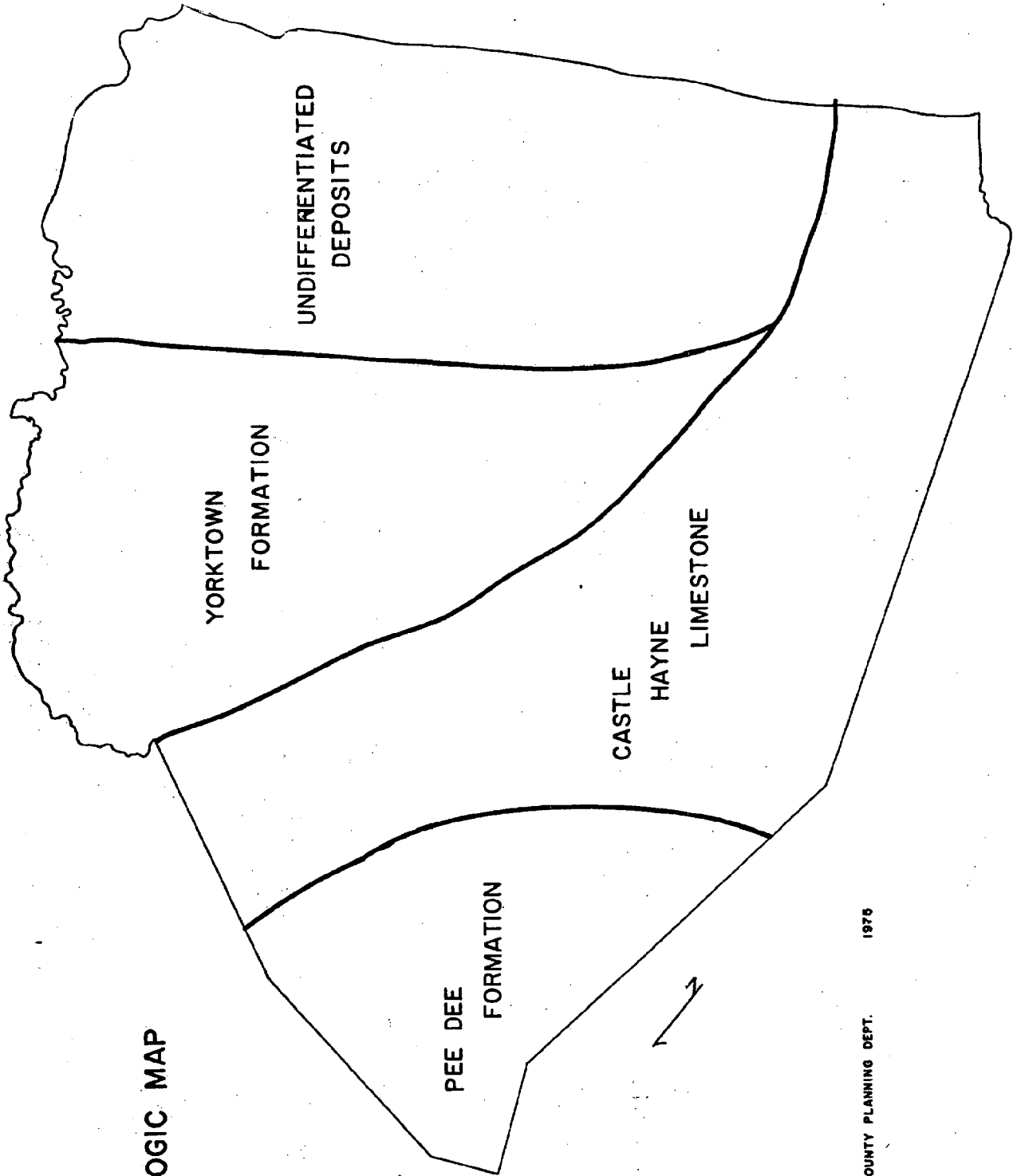
The generalized soil map along with the limitations chart provide a ready reference to soils in Onslow County; however, for more specific detail, the Soil Survey, Of Onslow County, North Carolina, prepared by the U.S. Department of Agriculture, Bureau of Soils, 1923, should be consulted. This report is available through the Onslow County Farm Agent's Office on College Street.

Water Supply Areas

Groundwater is the only water source in Onslow County used by urban development. This groundwater is obtained from three geologic ages: the oldest age penetrated by a well in Onslow County is the Pee Dee Formation, which lies within 30 feet of the surface in some valleys northwest of Richlands. Coastward, the Pee Dee is more deeply buried, lying under a wedge of Castle Hayne Limestone which thickens toward the coast. The Castle Hayne is exposed in many places in Onslow County along New River between Richlands and Jacksonville. The Yorktown formation overlaid the Castle Hayne, but it has been eroded away in parts of the county north of Jacksonville. Around the coast, the Yorktown reaches a thickness of around 60 feet. It is exposed, however, in several ravines near Silverdale and occurs within 60 feet of the surface in several wells at Camp Lejeune. A thin layer of sand and clay, chiefly sand, of the Pleistocene Age conceals the older formation in the interstream area.

The three main aquifers which furnish water to wells in Onslow County are the surficial sands, sands of the Pee Dee, and the Tertiary Limestone Unit. The surficial sands cover the entire County to a depth ranging from 10 to 30 feet, and, generally, they yield sufficient water for domestic purposes, as a result of a highwater table, usually within 15 feet of the surface. The sands of the Pee Dee formation furnish water to drilled wells in the northwestern part of the County. A city well drilled to

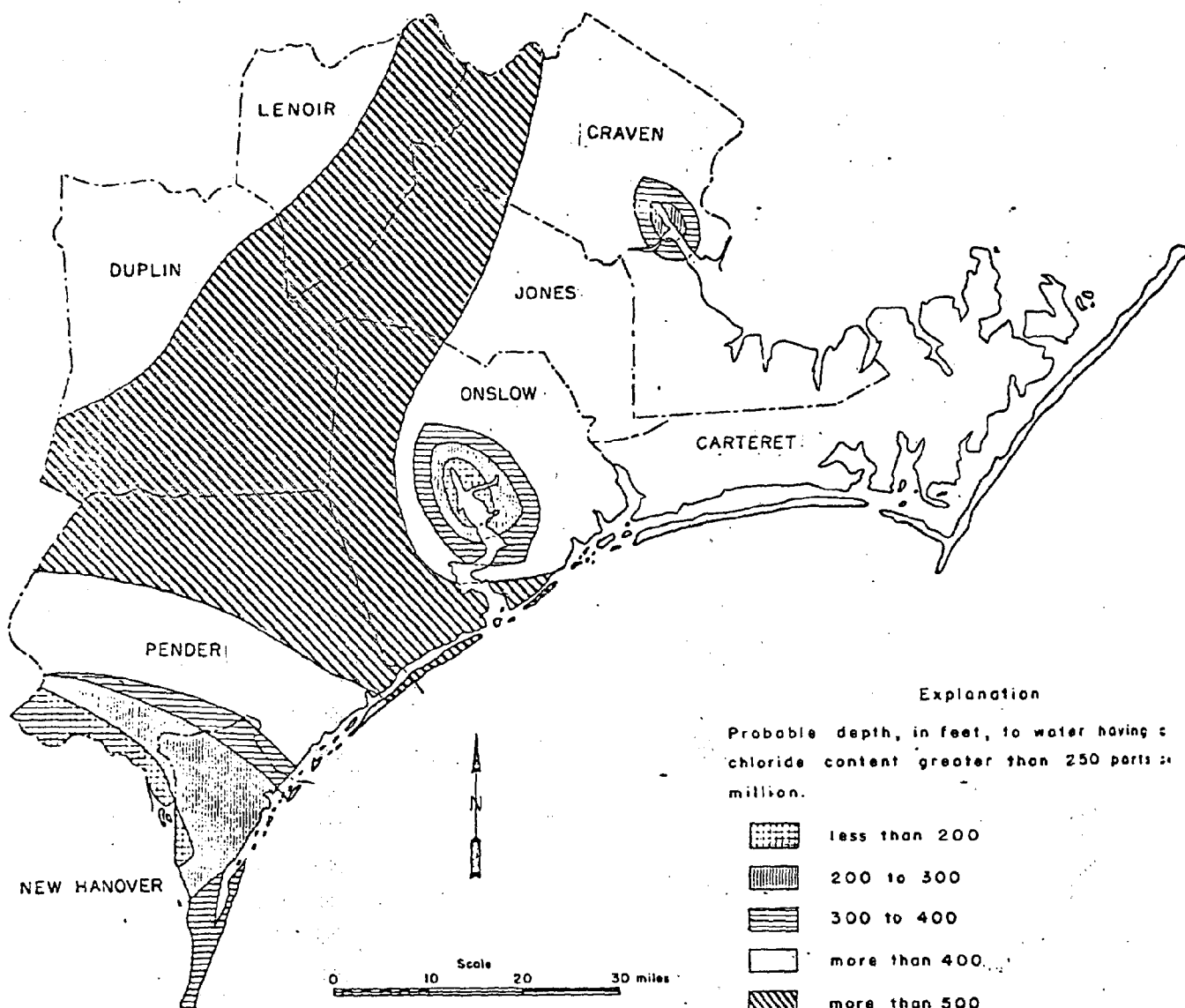
GEOLOGIC MAP



ONSLow COUNTY PLANNING DEPT. 1975

535 feet at Richlands yields approximately 500 gallons per minute; however, very little water is actually pumped from this formation because of the overlying Tertiary limestone aquifers, which furnish adequate water for domestic use. The Tertiary limestone unit represented largely by the Castle Hayne Limestone, lies between surficial sand and the Pee Dee formation. This aquifer furnishes water to wells, generally south of U.S. Highway 17. This limestone unit thins toward the north, but it is an important aquifer as far north as Richlands. The New River has intrenched into the limestone between Richlands and Jacksonville, resulting in a large aggregate discharge in ground water from this limestone formation into the river. The most serious problem concerning the quality of water in Onslow County, in most of these formations, is salt water encroachment. Care must be taken to keep pumping levels relatively shallow in a general area surrounding Jacksonville and Camp Lejeune, especially. There is no evidence that salt water encroachment has occurred to any great extent. There is no call for alarm as long as the wells are dispersed and the pumping level is controlled.

Onslow County's groundwater system is extremely important to urban development as it may be our most important resource. As pointed out previously, no domestic water supply is derived from surface waters; therefore, our groundwater supply is the only available source of water in the county area. However, groundwater resource investigations made by the N. C. Department of Natural and Economic Resources have indicated an adequate supply for urban development in the area.



Map showing approximate depth to brackish ground water.

The beach area itself should be an area in which available water should be carefully weighed. Most of the private wells are drilled from 12 to 15 feet deep for fresh water. Any well dug deeper than this, without a major drilling operation, will likely have salt water encroachment.

In summary, there is an abundance of potable water available to Onslow County. The quality of the water which may be drawn in any location in the county is largely dependent on the aquifer from which the water is drawn. Several areas of the county should not be considered as developable sources for large supplies of groundwater. The area in close proximity to Jacksonville and New River is a good example of an area to be avoided in developing a groundwater source of supply because of the possibility of salt water intrusion. Other areas experience problems with high iron and sulfide content, and must be treated prior to distribution.

The most desirable aquifer from which large quantities of excellent quality groundwater may be expected is the Pee Dee formation. The City of Jacksonville and Town of Richlands have wells which tap this formation. Camp Lejeune has developed an extensive, well supplied system and takes water from the limestone aquifer underlying central and eastern Onslow County.

The State of North Carolina has classified Wallace Creek and Flinchum Creek as B waters. Blue Creek, Brinson Creek and Mill Swamp have been classified as D waters. All other streams and rivers within the county are classified as C waters.

Steep Slope

With the exception of sand dunes along the ocean, the county does not have any steep slopes.

FRAGILE AREAS

Coastal Wetlands

Coastal wetlands are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide waters reach the marshland area through natural or artificial watercourses), provided this shall not include hurricane or tropical storm tides. Salt marshland or other marsh shall be those areas upon which grow some, but not necessarily all, of the following salt marsh and marsh plant species: smooth or salt water Cordgrass (*Spartina alterniflora*); Black Needlerush (*Juncus roemerianus*); Glasswort (*Salicornia* spp.); Bulrush (*Scirpus* spp.); Saw Grass (*Cladium Jamaicense*); Cat-Tail (*Typha* spp.); Salt Meadow Grass (*Spartina Patens*); and Salt Reed Grass (*Spartina cynosuroides*). Included in this statutory definition of wetlands is such contiguous land as the Secretary of National and Economic Resources deems reasonably necessary to be affected by any such order in carrying out the purpose of this Section.

For policy purposes, coastal wetlands may be considered in two categories: (1) low tidal marsh, (2) other coastal marshlands which have different significant and policy implications.

Coastal Wetlands - Low Tidal Marshland (Potential AEC)

Low tidal marshlands are defined as marshland consisting primarily of *Spartina alterniflora* and usually subject to inundation by the normal rise and fall of lunar tides. These marshlands

serve as a critical component in the coastal ecosystem. The marsh is the basis for the high net yield system of the estuary through the production of organic detritus (partially decomposed plant material), which is the primary input source for the food chain of the entire estuarine system. Estuarine dependent species of fish and shellfish, such as menhaden, shrimp, flounder, oysters and crabs currently make up over 90 percent of the total value of North Carolina's commercial catch.

In addition, the roots and rhizomes of the *Spartina alterniflora* serve as waterfowl food and the stems as wildlife nesting material. Low tidal marsh also serves as the first line of defense in retarding shoreline erosion. The plant stems and leaves tend to dissipate wave action while the vast network of roots resists soil erosion. Marshes of this type operate additionally as traps for sediment originating from upland runoff, thus reducing siltation of the estuarine bottoms and consequent detriment to marine organisms.

These marshes should be considered unsuitable for any development which will alter their natural functions. Inappropriate land uses include, but are not limited to, the following examples: restaurants and businesses, residences, apartments, motels, hotels, and trailer parks, parking lots and offices, spoil and dump sites, wastewater lagoons, public and private roads, highways, and factories. Examples of acceptable land uses are utility easements, fishing piers, docks, certain agricultural uses except when excavation or filling affecting estuarine or navigable

water is involved, and such other uses which do not significantly alter the natural functions of the marsh

Coastal Wetlands - Other Coastal Marshland (Potential AEC)

All other marshland that is not low tidal marshland which contains the species of vegetation was listed above.

This marshland type also contributes to the detritus supply necessary to the highly productive estuarine system essential to North Carolina's economically valuable commercial and sports fisheries. The high marsh types, depending on the biological and physical conditions of the marsh, offer quality wildlife and waterfowl habitat. The vegetative diversity in the higher marshes usually supports a greater diversity of wildlife types than the limited habitat of the low tidal marsh. This marshland type also serves as an important deterrent to shoreline erosion, especially in those marshes containing heavily rooted species. The dense system of rhizomes and roots of *Juncus roemerianus* are highly resistant to erosion. In addition, the higher marshes are effective sediment traps.

Appropriate land uses are those which give highest priority to the conservation of existing marshlands. Second priority shall be given to development which requires water access and cannot function anywhere else, such as ports, docks and marinas, provided that the actual location of such facilities within the marsh consider coastal, physical and biological systems and further provided that

feasible alternatives regarding location and design have been adequately considered and need for such development can be demonstrated. Such allocation may only be justified by the projected land use demands and by community development objectives, but in no case shall the allocation exceed the capacity of the marshland system to sustain losses, unless they would be offset by a clear and substantial benefit to the public without harm to the estuarine ecosystem.

Onslow County has extensive marshlands along the coast, inland of the beach strands.

Sand Dunes along the Outer Banks (Potential AEC)

Dunes are defined as ridges or mounds of loose wind-blown material, usually sand. They comprise a major portion of the outer banks and barrier islands, serving as a protective barrier for the sounds, estuaries, and mainland. Development with inadequate design or construction may alter the protective character of the dunes and subject property to an increased risk of substantial damage due to the adverse effects of wind and water. Appropriate land uses shall be only those developments that can be safely undertaken utilizing recognized engineering practices, site preparation and site maintenance to minimize unnecessary damage from wind and water.

Ocean Beaches and Shorelines (Potential AEC)

Ocean beaches and shorelines are land areas without vegetation covering and consist of unconsolidated soil material that

extends landward from the mean low tide to a point where any one or combination of the following occur: (1) vegetation, or (2) a distinct change in predominant soil particle size, or (3) a change in slope or elevation which alters the physiographic land form.

Sand deposits of ocean beaches and shorelines represent a dynamic zone which does not afford long term protection for development. The nature of tidal action and the force of storms is such that they cause the beach areas to shift constantly. Littoral drift is a natural phenomenon whereby sand is removed from beaches by wave action and littoral currents and is deposited upon a different stretch of the beach; this action also shifts the line of high tide and low tide. Ocean beaches and shorelines are valuable for public and private recreation and are located within a natural hazard area; thus development within this dynamic zone may result in loss of property and possible loss of life.

The area must be preserved to the greatest extent feasible with opportunity to enjoy the physical, aesthetic, cultural and recreational qualities of the natural shorelines of the State. Appropriate development within the area must be that type development which will withstand the prevalent natural forces and not unreasonably interfere with the rightful use and enjoyment of the beach area.

Estuarine Waters (Potential AEC)

Estuarine waters are defined in G. S. 113-229 (n) (2) as, "all the water of the Atlantic Ocean within the boundary of North Carolina

and all the waters of the bays, sounds, rivers and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Conservation and Development filed with the Secretary of State entitled 'Boundary Lines, North Carolina Commercial Fishing-Inland Fishing waters, revised March 1, 1975,'" or as it may be subsequently revised by the Legislature.

These areas are among the most productive natural environments of North Carolina, for they not only support valuable commercial and sports fisheries, but are also utilized for commercial navigation, recreation, and aesthetic purposes. Species dependent upon estuaries, such as menhaden, shrimp, flounder, oysters and crabs make up over 90 percent of the total value of North Carolina's commercial catch, and these species must spend all or some part of their life cycle in the estuary. The high level of commercial and sports fisheries and the aesthetic appeal of coastal North Carolina are dependent upon the protection and sustained quality of our estuarine areas.

Appropriate uses are those which will preserve and manage estuarine waters so as to safeguard and perpetuate their biological, economic and aesthetic values. Highest priority will be allocated to the conservation of estuarine waters. The development of navigational channels, the use of bulkheads to prevent erosion, and the building of piers or wharfs where no other feasible alternative

exists are examples of land uses appropriate within estuarine waters, provided that such land uses will not be detrimental to the biological and physical estuarine functions and public trust rights. Projects which would directly or indirectly block or impair existing navigational channels, increase shoreline erosion, deposit spoils below mean high tide, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters are generally considered incompatible with the management of estuarine waters.

Public Trust Waters (Potential AEC)

Public trust waters are defined as all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of state jurisdiction, all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark, all navigable natural bodies of water and lands thereunder to mean high water mark or ordinary high water mark, as the case may be, except privately owned lakes to which the public has no right of access, all waters in artificially created bodies of water in which exists significant public fishing resources or other public resources, which are accessible to the public by navigation from bodies of water in which the public has no rights of navigation, all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication or

any other means. Included in public trust waters are areas such as waterways and lands under or flowed over by tidal waters or navigable waters, to which the public may have rights of access or public trust rights, and areas which the State of North Carolina may be authorized to preserve, conserve, or protect under Article XIV, Section 5. of the North Carolina Constitution.

Appropriate uses in the public trust waters include channels, drainage ditches, bulkheads, piers and other similar uses, provided these uses do not damage the biological environment or restrict public access.

Areas Containing Unique Geologic Formations

The Belgrade quarry is considered a unique geologic formation. It has been providing high quality limestone construction material for almost a quarter century. The lakes left as a by-product of this strip mining operation provide an excellent recreational resource, for they are abundant in fresh water fish and open to public enjoyment. The Belgrade quarry is not considered a fragile area, so will not likely be designated as an Area of Environmental Concern.

Within the county there are no known complex natural areas; that is areas sustaining remnant species, registered natural landmarks, archeologic or historic sites listed in the National Register of Historic Places.

AREAS WITH RESOURCE POTENTIAL

Productive Agricultural Lands

By tradition, agricultural lands have played a major role in the county's economy. The farming regions are in the area around Richlands, within White Oak Township and, to a lesser degree, around Sneads Ferry. The big money crops are tobacco, corn and soybeans. Livestock also provides a major source of income. Adjacent to the City of Jacksonville, some prime agricultural lands are being used for urban development. In the remaining portions of the county, the total acreage of cropland in cultivation has remained relatively stable. The actual number of farms is decreasing because of a trend of larger farm owners purchasing smaller farms and combining that acreage with his own holdings. The trend toward greater mechanization is largely responsible for this phenomenon.

Potentially Valuable Mineral Sites

The mineral resources found in Onslow County are classed as non-metallic. Along the coast and for several miles inland the land is made up almost entirely of unconsolidated sands and clays which are of little value commercially. Inland there are several formations which are of greater value as the sands in that location are useful for construction materials, especially for road building. The limestone contains phosphate rock which makes it extremely important as a source of agriculture lime, road and airport foundation material, and aggregates for concrete and cement blocks. There is a limestone quarry at Belgrade, owned

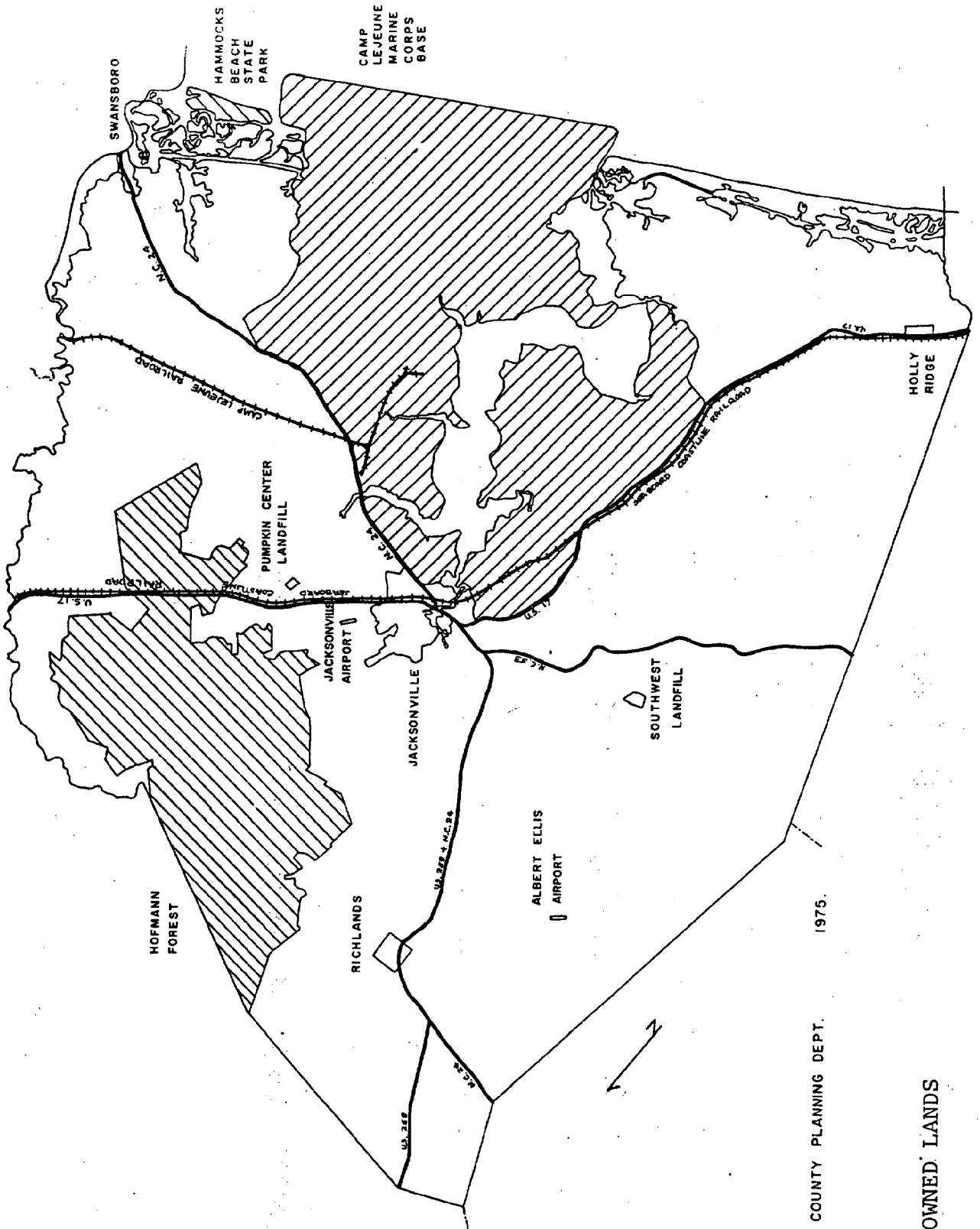
by the Martin Marietta Aggregates, that mines limestone for use in construction. The State Department of Transportation also mines paving sand for state highways from several borrow pits located throughout the county.

Seven oil and gas prospecting wells have been drilled in Onslow County, the deepest 1,570 feet, drilled in 1953; the shallowest 1,232 feet, drilled in 1960. There were eleven wells drilled in surrounding counties, (Carteret, Pender and Jones) with the deepest well in Carteret County at 5,609 feet, all of which were dry holes. Even though oil and gas have not been found, the thickness and character of the sedimentary beds found along the coast make Onslow County interesting for further research.

Publicly-Owned Lands

There are three major publicly-owned tracts within the county, the largest of these is the U.S. Marine Corps bases of New River and Camp Lejeune. These military owned lands account for approximately 20% of the county's total land and are not open for civilian public use.

Hofmann Forest, open to public recreational use, is the second largest publicly owned tract within the county. It is owned by North Carolina State University and is currently leased to timber corporation.



ON SLOW COUNTY PLANNING DEPT. 1975.

PUBLIC OWNED LANDS

The third major publicly-owned area within the county is Hammocks Beach State Park. This park is developed as an open-space recreation with picnic areas, camping areas and swimming areas provided. Access to the beach is via a passenger ferry which makes several round-trips daily.

Privately-Owned Wildlife Sanctuaries

There are no known privately owned wildlife sanctuaries within the county.

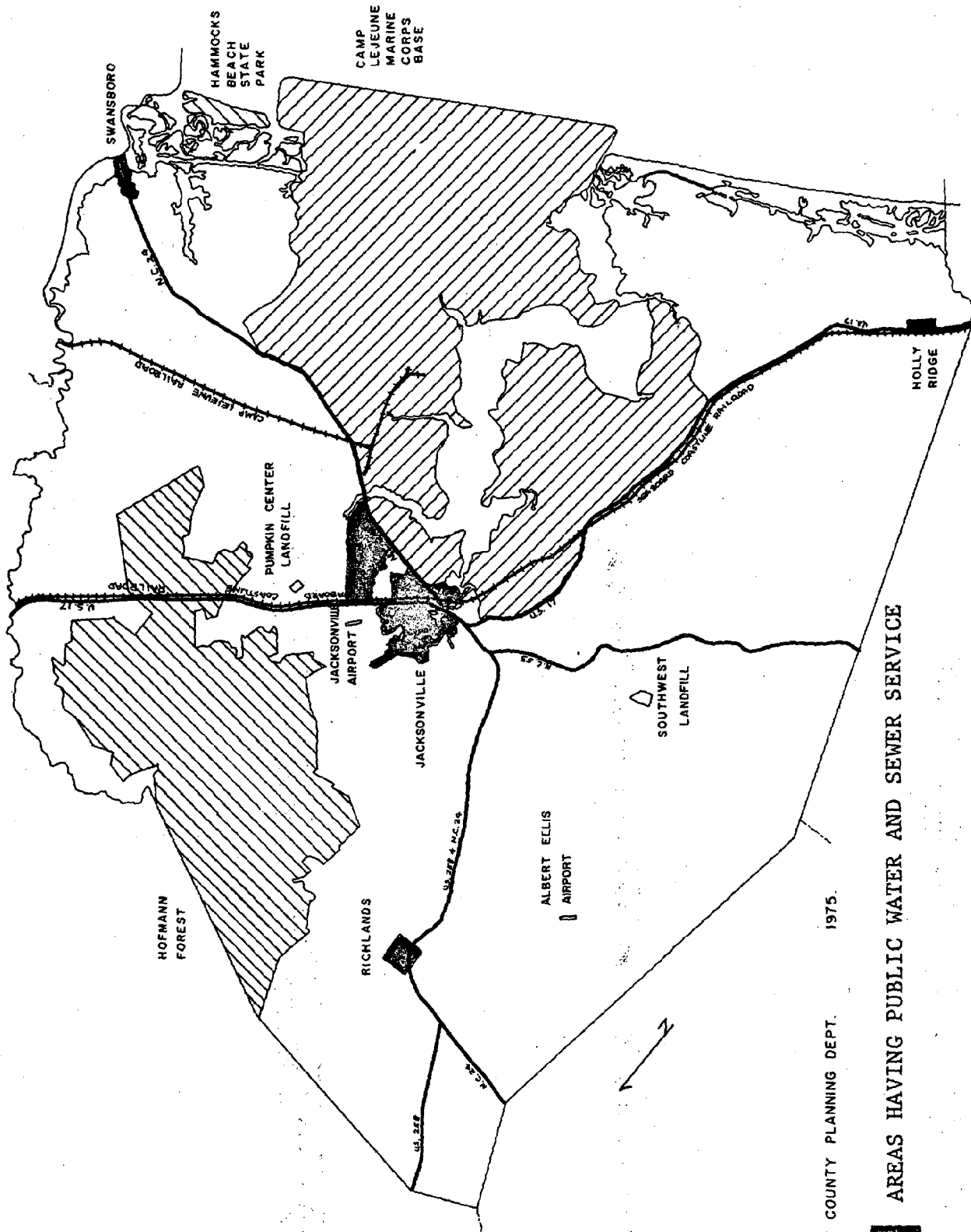
CAPACITY OF COMMUNITY FACILITIES

Existing Water and Sewer Service Areas

There are five areas within the county that have public water and sewer service. These are the City of Jacksonville, the Town of Richlands, the Town of Holly Ridge, the Town of Swansboro and the county-owned Brynn Marr Water and Sewer System. All of these systems are described in each perspective CAMA Land Use Plan with the exception of Swansboro and the Brynn Marr System.

Swansboro's sewer system services an estimated 1,080 people; a moratorium, however, has been placed on sewer expansion due to the inadequacy of the existing sewage treatment plant. This plant has a capacity of 250,000 gallons per day but only provides 50 percent treatment. The town is concerned about this problem and is proceeding as fast as possible to implement its EPA 201 Plan. Adjacent surface waters will benefit from planned improvements although the town's water system is adequate to serve existing needs.

The county's Brynn Marr system also needs improvements. Its lagoon treatment system provides sufficient treatment to its 300,000 gallons per day (GPD) before it is discharged into Northeast Creek. This treatment facility will likely discharge into another treatment facility under the City of Jacksonville's EPA 201 Plan. There is an agreement between the city and county for the city to provide treatment to 200,000 GPD of Brynn Marr sewage. A fifteen inch outfall will connect Brynn Marr to the city's system in late 1976. Water is provided to the Brynn Marr system by the City of Jacksonville.



ON SLOW COUNTY PLANNING DEPT. 1975.

AREAS HAVING PUBLIC WATER AND SEWER SERVICE



All schools are adequately staffed and utilized to the fullest extent possible. The long-range plans for the school system include four projects underway and five projects to be started. Renovations are scheduled for Richlands Elementary, Dixon Elementary, Thompson, Jacksonville Junior High and Tabernacle.

Morton Elementary is the fastest growing school with six temporary classrooms. Other overcrowded schools are Jacksonville Senior High and White Oak High. There is space available for extra students at Bell Fork Elementary. The overcrowded high schools will be relieved in 1976 by the completion of the new high school at Blue Creek.

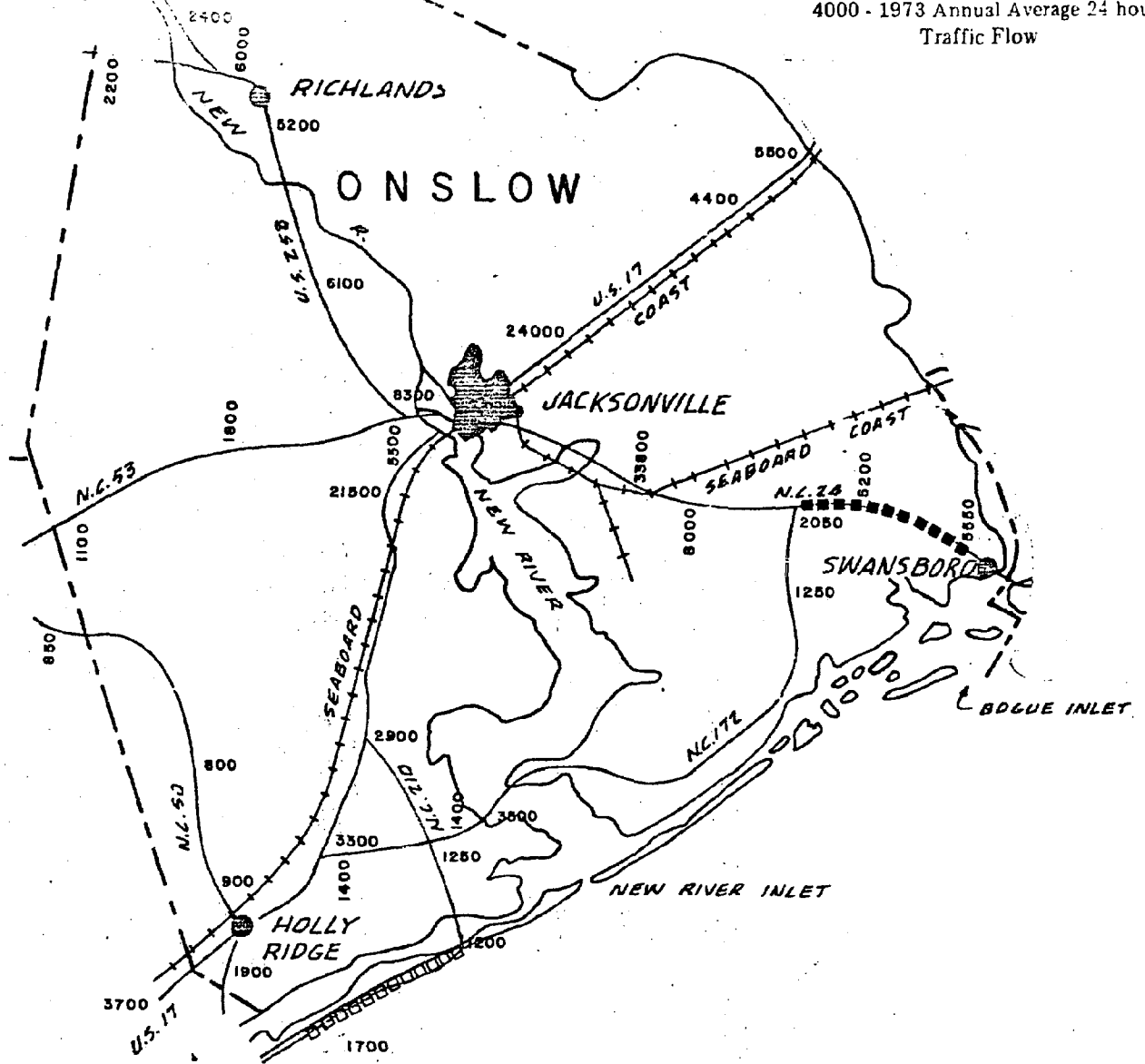
Table

ONslow COUNTY SCHOOLS
FUTURE CONSTRUCTION

Project Number	Name of Project	Year construction is contemplated	State Funds (Show only funds known to be available at this time)		Total estimated cost	Completion date
1	Morton Elementary Renovation	1974-75	255,000.00	293,272.20	255,000.00	Completed
2	Richlands Elementary Renovation	1974-75			310,315.00	1978
3	Swansboro Junior High (New)	1974-75	550,000.00	489,389.75	550,000.00	Completed
4	Southwest Jr. - Sr. High (New)	1974-75	2,200,000.00		2,200,000.00	June 1976
5	Dixon High Gymnasium (New)	1974-75	470,000.00		470,000.00	June 1976
6	White Oak Addition Bank Room & Classrooms	1974-75	250,000.00		250,000.00	June 1976
7	Dixon Elementary Renovation	1976-77		300,000.00	300,000.00	1977
8	Tabernacle Renovation	1975-76		100,000.00	100,000.00	Phase I Complete
9	Swansboro Elementary Renovation	1975-76		200,000.00	200,000.00	Sept. 1976

The North Carolina Department of Transportation (NCDOT) has not prepared a transportation plan for Onslow County. There are improvements scheduled for Onslow County within the North Carolina Seven Year Plan. The improvements are shown on the following map. Based upon records of the NCDOT, Western Boulevard is the only highway which is over design capacity. Its design capacity is 9,000 cars per day, but the 1975 traffic count for this road was 14,000, 5,000 over design capacity.

4000 - 1973 Annual Average 24 hour
Traffic Flow



N.C. SEVEN YEAR IMPROVEMENT PLAN

- NEW FOUR-LANE
- RELOCATE EXISTING TWO-LANE
- ◆ REPLACE EXISTING BRIDGES
- UPGRADE EXISTING TWO-LANE
- UPGRADE EXISTING TWO-LANE TO FOUR

ESTIMATED DEMAND

POPULATION PROJECTIONS

Population projections are necessary to determine the approximate level of public services which will be necessary in the future.

Projections for Onslow County were collected from state agencies and engineering firms which were preparing EPA 201 Sewer Facility Plans within Onslow County. Several of those projections appear to be correct, while others indicate that future population growth will take place at a much slower rate than the present trend indicates.

The North Carolina Department of Administration (DOA) was one of the agencies contacted for population projections.

ONSWLOW COUNTY POPULATION PROJECTION 1970 - 2020

Year	White	Non-White	Total
1970	86,516	16,610	103,126
1980	101,494	22,818	124,312
1990	102,202	27,654	130,356
2000	111,659	34,468	146,127
2010	117,347	41,875	159,222
2020	122,721	50,404	173,125

SOURCE: North Carolina Department of Administration

BEA Series "E" projections were provided by the North Carolina Department of Natural and Economic Resources Division of Environmental Management. These projections, not likely to be

correct, show a growth rate much slower than the present trend. The 2020 projection is less than the 1975 population as estimated by DOA.

ONSLOW COUNTY POPULATION PROJECTION
BEA "SERIES E"

Year	Total
1960	86,208*
1970	103,126*
1980	106,700
1990	108,000
2000	111,400
2010	112,700
2020	113,200

*Bureau of the Census

SOURCE: North Carolina Department of Natural and
Economic Resources .

Building inspection records are one of the best resources for projecting future growth. Because this data did not cover sufficient time to indicate a trend, it was not used; only past growth rates were used. The growth rate since 1940 is as follows:

PAST GROWTH TREND
ONSLOW COUNTY 1940-1975

Year	Population	Annual Increase
1940	17,938	--
1950	42,047	13.4%
1960	86,208	10.5%
1970	103,126	2.0%
1975	113,806	1.8%

SOURCE: Bureau of the Census

The annual growth rate from 1970 to 1980 will likely be approximately 1.8%. This trend indicates that the tremendous growth within Onslow will level off as time tempers the impact of Camp Lejeune on Onslow County. The following projection takes into consideration this tempering phenomenon.

POPULATION PROJECTION
ONSLow COUNTY 1975-2025

Year	Population	Annual Increase
1975	113,806	
1980	124,048	1.8%
1985	132,731	1.4%
1990	139,367	1.0%
2000	150,516	0.8%
2025	165,567	0.4%

SOURCE: Moore and Associates, New Bern, N. C.

Population projections are not absolute, as it is also extremely difficult to project a population for a fifty-year period, a range projection is more appropriate. A progressive percentage up to fifteen percent for fifty years was applied to the above projection to obtain the following range.

POPULATION PROJECTION
ONSLow COUNTY 1975-2025

YEAR	RANGE
1975	113,806
1980	122,187 - 125,909
1985	128,659 - 136,803
1990	133,096 - 145,628
2000	139,227 - 161,805
2025	140,732 - 190,402

SOURCE: Moore and Associates, New Bern, N. C.

The population projection range appears reasonable and is in line with the selected desired future population of the Citizens Advisory Council and Planning Board. This selection is as follows:

SELECTED PROJECTIONS

PRESENT	5 YEAR	10 YEAR	25 YEAR	50 YEAR
<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>2000</u>	<u>2025</u>
113,806	125,600	154,726	160,000	191,000

These population figures were selected by the Citizens Advisory Council and Planning Board as good projections of the population increases expected for Onslow County. The ten-year projection was calculated from a straight line projection between the years 1980 and 1990. This projection is consistent with the views expressed by the citizens in the county's public participation program.

In arriving at a decision about these population figures, there was a great deal of discussion about the areas of the county in which the population would probably grow. These areas are shown on the Land Classification map and are primarily the areas being considered in the 201 Study: Swansboro, West Onslow Beach and Jacksonville.

The soils information is limited with only general classifications available. More study is needed to assess fully the quality of soils for development. Water resources are plentiful in Onslow County: the only problem areas being the beach vicinity. Large population and lack of potable water available at the beach may necessitate pumping water from sources off the island.

The development of West Onslow Beach will be predicted on whether a sewer system can be economically constructed on the island. This single factor will account for a large percentage of the population growth in the county. The population projections for West Onslow Beach are as follows:

POPULATION PROJECTIONS OF WEST ONSLOW BEACH

	PERMANENT	AVERAGE SEASONAL	PEAK SEASONAL	MAXIMUM POPULATION
1975	290	2,040	3,670	3,960
1985	742	5,155	9,275	10,017
1995	1,430	9,827	12,869	19,299

Note: This information was collected by the engineering firm of Coastal Zone Resources Corporation and was presented in a technical report of West Onslow Beach by the Department of Natural and Economic Resources, Division of Community Assistance, Southeast Field Office

As can be seen from the table, increases in the peak seasonal population of 5,605 persons (153%) and 8,594 persons (92%) may be expected between the years of 1975-1985 and 1985-1995. The peak seasonal population does not mean that a particular number of persons would be present in the area at a given time, but, rather, many persons could be expected to visit the area on a peak day, such as a weekend day during the months of June, July or August, the Fourth of July or Labor Day. While the peak seasonal population projections for 1985 and 1995 may seem high, by comparison they are low. The peak seasonal population estimate for 1975 for the Town of Wrightsville Beach is approximately 16,000. As these figures indicate, there are two different types of population

that use the beach area, permanent and seasonal, and it is the seasonal population that will have the greatest impact on land use.

FUTURE ECONOMY

Economic conditions of an area play a major role in the expansion or contraction of employment opportunities. Onslow County's economy is highly dependent on Camp Lejeune Marine Corps Base, whether directly through employment opportunities on the base or indirectly through the provision of goods and services in the civilian community, such as retail trade, housing, etc.

All present indicators show the base population has stabilized; therefore, future employment increases must come from provision of jobs in the civilian sector of the economy.

CIVILIAN EMPLOYMENT BY INDUSTRIAL BREAKDOWN 1970

	ONslow COUNTY		REGION P.	
Total	18,970	100%	134,295	100%
Agriculture	1,090	5.7	19,210	12.1
Nonagriculture	17,880	94.3	115,085	87.9
Manufacturing	1,340	7.1	24,575	19.4
Construction	620	3.3	6,180	6.5
Trades & Services	5,980	31.5	31,315	23.5
Transportation & Communication	1,090	5.8	4,170	3.0
Government	6,835	36.0	29,395	20.1
All other non-manufacturing	2,015	10.6	19,450	15.4

SOURCE: Region P Multi-County Statistical Data, May 1972 Neuse River Council of Government

ESTIMATED EMPLOYMENT BY INDUSTRIAL BREAKDOWN FOR
1975, 1980, 1990, 2000 FOR ONSLOW COUNTY

	1975	1980	1990	2000
Total	20,892	23,014	24,294	25,483
Agriculture	1,191.8	1,312	1,385	1,453
Nonagriculture	19,701.1	21,702	22,909	24,031
Manufacturing	1,483.0	1,634	1,725	1,809
Construction	689.1	759	801	841
Trades & Services	6,581.0	7,249	7,653	8,027
Transportation & Communication	1,212	1,335	1,409	1,478
Government	7,521	8,285	8,746	9,174
All other non-manufacturing	2,215	2,440	2,575	2,701

These projections are from straight line projections of percentages of people employed in each of the categories. The projections do not take into account the possibilities of reductions in employment in any field.

The civilian job market must improve in order to provide for the estimated growth. New or enlarged industries will likely be located within the community, and services for additional population will be provided. This increase in industry indicates a need for more residential, industrial, commercial and recreation land for the people employed in industry or commerce.

Mineral Resources could have an effect on the economy of an area, but presently the specific sites of such mineral wealth have not been established for Onslow County; however, it is possible that glass sand, gravel, marl, agricultural limestone, chemical limes and cement limes can be found in this area.

Detailed studies need to be undertaken by the state to show what important mineral resources are available and the economic

feasibility of extracting the resources before any consideration can be given to the provision of specific land use in this area.

FUTURE LAND NEEDS

Onslow County is growing; the estimated population for 1975 is 113,809. According to some estimates, the 1980 population may be as high as 125,909. To accommodate this growth, land must be provided to locate the various types of land use in the county. Recreation lands, residential areas, industrial areas, commercial areas and environmental areas need to be set aside in order for development to occur in an orderly fashion.

Intensive use recreation areas are needed in the more rural townships of Stump Sound, White Oak, Richlands and Swansboro. Jacksonville Township seems to have ample recreation areas with the City of Jacksonville's recreation program and the Onslow Recreation Park. Jacksonville's recreation needs are covered in greater detail in the Jacksonville Land Use Plan.

In estimating the recreation land needed in Onslow County, two totals were formulated: the total acreage of recreation land and the total number of people in the county proper. Approximately 1,004 acres are presently used for recreation in the county. This total is a combination of school acreage, parks and state parks. Forty-six thousand eight hundred seventy-one (46,871) people live in the county, or 41% of the total population. This figure was derived

by multiplying the total number of housing units in the county (taken from house count March 1975) by 3.4 people per house from the 1970 census. By dividing these two figures and multiplying by 1,000 people, the two acres of recreational land per 1,000 people were achieved. *21 acres / 1,000 people*

A guide for acres per 1,000 people of recreation land is eight acres of recreation land per 1,000 persons. This figure was provided by the North Carolina Department of Natural and Economic Resources, Northeastern Field Office, Washington, North Carolina. In comparing the two figures, Onslow is six acres per 1,000 people short in the county at present or 368 acres short. If the beach areas are added, the recreation land is sufficient until 1990. However, there are needs for specialized recreation areas in different locations. Pure acreage figures do not represent a clear picture of recreation needs, and it is recommended that a detailed recreation study be prepared.

The estimates for residential land are based on the same population figures as the recreation figures. The total number of acres is calculated by multiplying the total number of houses by .07 acres of land. The latter figure is an estimate of an average residential lot in Onslow County, and the small acreage assigned per house reflects the large number of mobile housing units in trailer parks. A more accurate figure will be available

upon completion of the tax department record computerization program. The total acreage estimated to be in residential use in the county is 967 acres. By dividing the 967 acres by 46,871 people, .02 acres of residential land per person in the county is obtained.

The civilian population increase for the ten-year projection will be 15,294, or assuming county population growth at 19% of the total county population, 2,905 people will be in need of housing in the county, for a total of 3.497 units needed by 1985.

The estimated industrial land demand will increase as the economy of the state and nation improves. There are no sure means of determining how many industries will locate in Onslow County; the closest approximation is an attempt to show the relationship of industry to population.

Industry occupies 500 acres of land in Onslow County. Using the 46,871 estimated population figure, there are .01 acres of industrial land per person. By 1980, assuming an increase of 11,971 persons, an additional 119 acres will be needed. In 1990 with a projected 7,000 person increase, 70 more acres will be needed for a total of 689 acres devoted to industry. The county should plan on approving 189 acres for industrial growth.

Commercial growth is determined in the same manner as residential growth. Approximately 614 acres are being used for commercial land use. This figure is the product of 512 identified

commercial sites in the county (housing count March 1975) and an estimated 1.2 acres per average commercial lot in the county. With our 46,871 person population figure, we arrive at .01 acres of commercial land per person in the county. Using this .01 acres per person, by 1980 we will need 119 additional acres for commercial use. By 1990 the county will need 70 more acres for commercial use totalling 803 acres; therefore, the county should plan on needing approximately 189 more acres of land for commercial purposes.

TOTAL LAND NEEDS PROJECTIONS (ACRES)

	<u>1975</u>	<u>Increase</u>	<u>1980</u>	<u>Increase</u>	<u>1990</u>
Recreation	1,004				
Residential	967	235	1,202	140	1,342
Industrial	500	119	619	70	689
Commercial	614	119	733	70	803

The future land needs are for Onslow County, excluding municipalities and the Marine Corps Base.

Zoning designates areas for specific uses and provides for the future orderly development desired in increments sufficient to meet estimated demand. Within the residential section, subdivision regulations are highly desirable to provide needed open space and quality layouts for drainage, street construction and utilities easements. These two methods of providing for specific land uses were identified by the Citizens Advisory Council and the Planning Board.

Water and sewer facilities are all but non-existent in the county. Provisions should be made for a comprehensive study for providing the county with detailed time tables for provision of water and sewerage services in areas where the growth of the county is expected.

West Onslow Beach

In developing alternative schemes for development, several factors need to be considered. These are the different types, locations, intensities of desired development and the various constraints--legal, physical and economic on each of these various types, locations and intensities. In considering these factors and selecting a development plan, the Planning Board and Commissioners will be deciding how to use a unique and irreplaceable county resource so that the welfare and enjoyment of all citizens of the county are maximized. With the construction of the new bridge and relocation of Highway 210, development pressures have been greatly increased, and failure to take positive and decisive action will inevitably result in a reduction, and possibly destruction of those values that make the West Onslow Beach area important to the entire county.

The type of land use mix that appeared most desirable to citizens of the area based on the opinion survey is predominantly single-family residential (exclusive of mobile homes) with normal tourist and recreation oriented commercial facilities.

Two basic questions must be answered with regard to this alternative. Should mobile homes be excluded, and what types and how much commercial development is desirable? Most mobile homes on North Carolina's coast have not been subjected to severe storms such as hurricanes. A major catastrophe is likely when a hurricane of the force of Hazel strikes--as inevitably it will. Nearly 5,000 mobile homes yearly are destroyed by high winds in the U. S. because of their vulnerability to high winds and light weight construction with flat sides and ends. Thus, if mobile homes are to be considered as equivalent to conventional single-family housing, then they should meet the same safety requirements of stability.

A second important question relates to the intensity of residential development. While this question will not have to be determined until water and sewer facilities are available, the presence of high rise apartments or condominiums in the beach area may become a possibility if sewer facilities are eventually made available under the current 201 Facilities Plan.

The location and intensity of development will be largely controlled by the County Zoning Ordinance, septic tank rules and regulations, federal and state water quality laws, the County Dune Protection Ordinance, and the North Carolina Dredge and Fill Law. While the ultimate effect of the Coastal Area Management

Act cannot be determined at this time, the other laws will effectively prohibit development in marshlands and surrounding waters, on beaches or sand dunes and in those areas where septic tanks may not be approved. Thus, the development pattern that will emerge will largely be determined by the availability of properly zoned suitable sites for development.

The impact of available water and sewer facilities would probably result in a drastic alteration of existing land use patterns and it is critical that county officials decide soon whether or not a more intense level of development is desirable. While more intense development may raise land values and therefore property taxes and revenues, the loss to all county citizens of an accessible and valuable resource can more than offset this gain.

COMMUNITY FACILITIES DEMAND

In determining future needs for public buildings, a survey was conducted to obtain an assessment of future office needs for county departments and for state and federal agencies requiring space in county owned buildings. This survey indicated that many

county agencies are located in cramped offices with a lack of room for expansion, thus indicating that more office area must be provided. Eighteen of twenty agencies anticipate increased space requirement in the 1980-1990 planning period.

A more detailed space needs study, which will help to guide county officials in the areas of land acquisition and capital improvements budgeting, should be undertaken to fully assess existing and future needs.

The cultural and social facilities need of the county involve two areas; namely, the public library and a civic auditorium. A new library facility is presently under construction, and space will be adequate for a facility in a county of this size. The expansion of this building and the services which the library provides should be considered in the light of projected population growth. An auditorium could provide a common meeting place, recreation facilities, and cultural benefits, such as increased seating capacity for concerts, plays and other cultural activities. Further studies should be undertaken to determine the cost of such a facility together with estimates indicating the extent to which a civic center could generate revenues to sustain operational and maintenance costs.

Additional recreation facilities are needed in Onslow County. There is an estimated need of 368 acres of land, particularly in the Stump Sound, Richlands, White Oak and Swansboro Townships. To further establish the specific needs of each township, a detailed recreation study should be undertaken. This study could specify

land areas and detailed requirements based on population trends for each township.

The schools in the county are adequate for the present population, but the provisions for additional schools are presently being assessed by the school board. The only problems anticipated by the county school system are unforeseen population shifts and renovation of aging schools.

Coastal Carolina Community College has a detailed expansion program underway with additional planning contingent upon enrollment.

The demands for medical facilities center around two areas, increased space for the Onslow County Health Department and provision of greater capacity for the care of the aging.

According to the information supplied by the N. C. Department of Human Resources, the County Health Department anticipates doubling its staff by 1980 and quadrupling its staff by 1990. The increased needs are based on additional missions and tasks assigned by the State. These growth figures indicate a need for additional office and clinic space.

The facilities needed for increased water and sewer services will include treatment plants and water and sewer lines to accommodate the three 201 Facilities Planning Areas. Future phases of the 201 plans will include specific site locations of treatment facilities and location studies for water and sewer lines.

For the areas not covered by the 201 plans, water and sewer facilities must comply with regulations adopted by the State

and enforced by the County Health Department. These requirements will mean an increase in staff and office space for the Health Department; a laboratory will also be needed for chemical analysis.

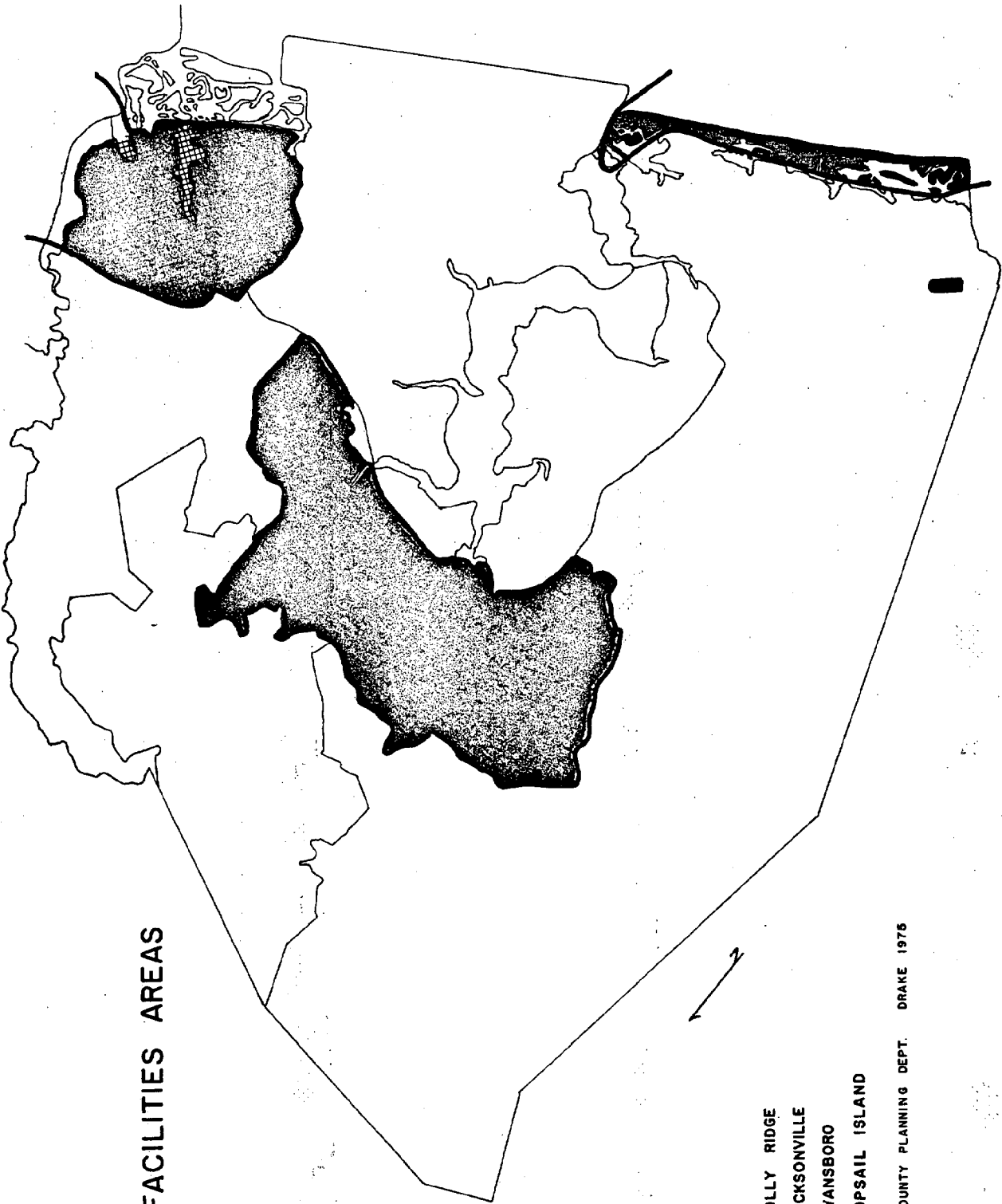
As the existing jail is constantly overcrowded, plans are needed for expansion to help meet existing and future needs. More office and storage space could also be utilized by the Sheriff's Department.

The rescue squads are in need of a better alert system to speed them to the scene of a call. Provisions could also be made for the continuous upgrading of the rescue squads and volunteer fire departments' equipment to eliminate any equipment shortages.

Within the next decade, public sewage service and treatment will be the key elements for major development, EPA 201 Sewage Facility Plans are in the planning stage for the areas shown on the following map. Those plans will describe facilities necessary for expected growth over the next twenty-five years. Development outside of these areas will continue to rely on private wells and septic tanks, constructed to state standards. Onslow County has a sufficient tax base to provide the necessary services for growth over the next decade.

150

201 FACILITIES AREAS



LEGEND

- HOLLY RIDGE
- JACKSONVILLE
- SWANSBORO
- TOPSAIL ISLAND

ON-SLOW COUNTY PLANNING DEPT. DRAKE 1975

PLAN DESCRIPTION

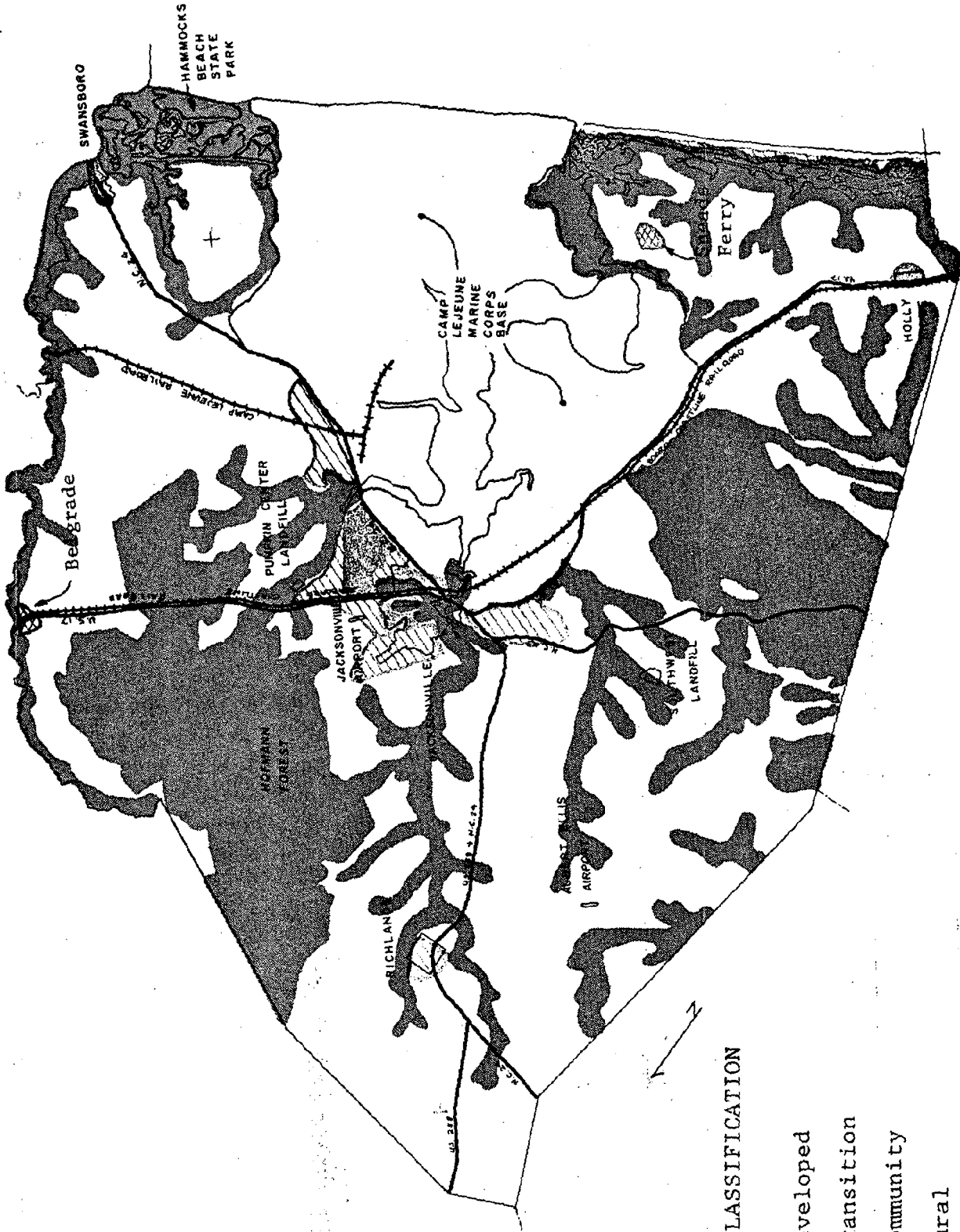
THE LAND USE PLAN

The Coastal Area Management Act requires that lands within the jurisdiction of a local government be classified as Developed, Transition, Community, Rural or Conservation. Within Onslow County, each of those classifications is present. Because Camp Lejeune is not within the planning jurisdiction of Onslow County, land classifications were not assigned to the military facility.

The Developed class identifies developed lands which are presently provided with essential public services. Consequently, it is distinguished from areas where significant growth and/or new service requirements will occur. Continued development and redevelopment should be encouraged to provide for the orderly growth in the area.

Developed lands are areas with a minimum gross population density of 2,000 people per square mile. At a minimum, these lands contain existing public services including water and sewer systems, educational systems, and road systems--all of which are able to support the present population and its accompanying land uses, including commercial, industrial, and institutional. The City of Jacksonville and the adjacent Brynn Marr subdivision are classified as Developed.

The Transition class identifies lands where moderate to high density growth is to be encouraged and where any such growth that is permitted by local regulation will be provided with the necessary public services.



LAND CLASSIFICATION

- Developed
- Transition
- Community
- Rural
- Conservation

The area to be designated as Transition must be no greater than that required to accommodate the estimated county population growth at a minimum gross density of 2,000 people per square mile; for example, if the population increase for the following ten year period is estimated to be 10,000 people, and it is planned that 8,000 of them will be accommodated in the Transition area, then no more than four square miles of Transition area should be shown. In addition, the minimum services which will be required are the necessary water and sewer facilities, educational services, and roads. Consideration must be given to the cost of public services in the Transition area, and local government is encouraged to estimate the approximate cost of providing public services where they do not already exist.

(Land to be classified Transition should be considered in the following order.

- 1) First priority is for lands which presently have a gross population density of more than 2,000 people per square mile, but do not qualify as Developed because they lack the necessary minimum public services. These areas may not be expected to accommodate additional population, but they will require funds for services to avoid public health and safety problems.
- 2) Second priority is for lands that have all the necessary public services in place, but which lack the minimum gross population density of 2,000 people per square mile needed to qualify the area as Developed. These areas therefore have not utilized the capacity of the existing services.
- 3) Additional lands necessary to accommodate the remainder of the estimated Transition growth for the ten year planning period.

In choosing lands for the Transition class, such lands should not include:

- 1) Areas with severe physical limitations for development with public services.
- 2) Lands which meet the definition of the Conservation class.
- 3) Lands of special value, such as the following, unless no other reasonable alternative exists:
 - (a) Productive and unique agricultural lands;
 - (b) Productive forest lands;
 - (c) Potentially valuable mineral deposits;
 - (d) Potential aquifers and key parts of water supply watersheds;
 - (e) Scenic and tourist resources;
 - (f) Habitat for economically valuable wildlife species;
 - (g) Flood fringe lands;
 - (h) Open coast flood hazard areas, exclusive of ocean erosive areas;
 - (i) Estuarine flood hazard areas, exclusive of estuarine erosive areas

The fringe areas adjacent to Jacksonville and the Towns of Swansboro, Richlands and Holly Ridge are classified as Transition.

The Community class identifies existing and new clusters of low density development not requiring major public services.

Description:

- 1) The Community class includes existing clusters of one or more land uses, such as a rural residential subdivision or a church, school, general store, industry, etc. (Cluster is defined as a number of structures grouped together in association or in physical proximity - Webster's Dictionary).

- 2) This class will provide for all new rural growth when the lot size is ten acres or less. Such clusters of growth may occur in new areas, or within existing community lands. In choosing lands for Community growth, such lands should not include:
- (a) Areas with severe physical limitations for development;
 - (b) Areas meeting the definition of the Conservation class;
 - (c) Lands of special value such as the following unless no other reasonable alternative exists:
 - (1) Productive and unique agricultural lands;
 - (2) Productive forest lands;
 - (3) Potentially valuable mineral deposits;
 - (4) Potential aquifers and key parts of water supply watersheds;
 - (5) Scenic and tourist resources;
 - (6) Habitat for rare and endangered wildlife species and economically valuable wildlife species;
 - (7) Flood fringe lands;
 - (8) Open coast flood hazard areas, exclusive of ocean erosive areas;
 - (9) Estuarine flood hazard areas, exclusive of estuarine erosive areas.
- 3) New development in the Community class areas will be subject to subdivision regulations under the Enabling Subdivision Act (G.S. 153A-330 et. seq.)
- 4) In every case, the lot size must be large enough to accommodate safely on-site sewage disposal and, where necessary, water supply so that no public sewer services will be required now or in the future.

- 5) Limited public services should be provided in the Community class, such as public road access and electric power.
- 6) As a guide for calculating the amount of land necessary to accommodate new rural community growth, a gross population density of 640 people per square mile, or one person per acre, should be used. If 1,000 new people, for example, are expected to settle in low density clusters during the following ten year period, then roughly 1,000 acres of land should be allocated for new growth in Community Class areas.

Belgrade and Sneads Ferry are classified as Community.

The Rural class identifies lands for long-term management for productive resource utilization and where limited public services will be provided. Development in such areas should be compatible with resource production. The Rural class includes all lands not in the Developed, Transition, Community and Conservation classes.

The Conservation class identifies land which should be maintained essentially in its natural state and where very limited or no public services are provided.

Lands to be placed in the Conservation class are the least desirable for development because:

- 1) They are too fragile to withstand development without losing their natural value; and/or
- 2) They have severe or hazardous limitations to development; and/or
- 3) Though they are not highly fragile or hazardous, the natural resources they represent are too valuable to endanger by development.

Such lands include:

1) Fragile Areas

- (a) Wetlands
- (b) Steep slopes and prominent high points
- (c) Frontal dunes
- (d) Beaches
- (e) Surface waters including
 - Lakes and ponds
 - Rivers and streams
 - Tidal waters below mean high water
- (f) Prime wildlife habitat
- (g) Unique natural areas and historic and archaeological sites

2) Hazardous Areas

- (a) Floodways
- (b) Ocean erosive areas
- (c) Inlet lands
- (d) Estuarine erosive areas

3) Other Areas

- (a) Publicly owned forest, park, and fish and game lands and other non-intensive outdoor recreation lands
- (b) Privately owned sanctuaries, etc., which are dedicated to preservation
- (c) Publicly owned water supply watershed areas
- (d) Undeveloped key parts of existing water supply watersheds
- (e) Potential water impoundment sites

SUMMARY

The purpose of this planning document is to provide elected officials with a comprehensive description of present land use in Onslow County together with a listing of constraints, capacities and future demands. The impetus for the preparation of this study is derived from the Coastal Area Management Act of 1974 enacted by the North Carolina General Assembly. This act requires preparation of studies and plans to be monitored by the Coastal Resources Commission.

Extensive efforts were made to obtain citizen participation in the preparation of this study, including appointment of a Citizens Advisory Council to assist the Onslow County Planning Board. News media were most helpful in soliciting public opinion, and questionnaires were distributed to a wide segment of Onslow County's population.

The text contains an analysis of the patterns of land use, population trends, social characteristics and a study of community facilities. Based on these studies, estimated demands were projected in the areas of the economy, land use and community facilities.

The Citizens Advisory Council and Planning Board have formulated recommendations for the future use of land and facilities based on present conditions and estimated future demand. Principal recommendations involve the enactment of land use regulatory controls and delineation of areas of environmental concern, together

with recommendations for the provision of adequate community facilities, all of which are predicated on population projections prepared by the planning staff in coordination with other local and state agencies.

It is hoped that the preparation of this document and accompanying maps provide sufficient data and recommendations which will provide a basis for the implementation of plans which will provide for orderly growth, economic opportunity and a liveable environment without curtailment of property rights.

The Land Use Plan was prepared with the help of all state, local and citizen participation which could be available. The state offices have been extremely helpful in providing information ranging from figures for population, recreation, fishing, etc., to clarifying questions on the Coastal Area Management Act Guideline interpretation. The local governmental agencies have helped assemble the local policies and vital figures used throughout the plan and have helped tremendously in arriving at the best solutions to problems of a factual nature. Specific sources include the following:

- Coastal Resources Commission
 - Planning Guideline
 - Regulations dated January 22, 1976

- Onslow County
 - County Commissioners
 - Planning Board
 - Citizens Advisory Board
 - Health Department
 - Economic Development
 - Planning Department
 - Administrative Department
 - Local Codes and Ordinances

EPA 201 Plans
Public Works

State of North Carolina
DNER - Division of Community Assistance
Department of Administration

U.S. Government

USDA - Soil Conservation Service
USDA - Agricultural Stabilization
U. S. Army Corps of Engineers
Bureau of the Census

The Planning Department of Onslow County has assembled the information for review by the citizen groups for numerous discussions. By providing all of this information to the citizens of the county and soliciting their ideas and problems, the Land Use Plan was formulated.

CITY-COUNTY PLAN RELATIONSHIP

There has been good cooperation in the planning process between the city and the county. Dr. William Qualls of G. Reynolds Watkins Consulting Engineers, who prepared the Jacksonville Land Use Plan, and the Onslow County Planning Department have been mutually receptive to ideas of all planning related activities. All avenues of mutual interest have been discussed for decisions reached. Participation included Onslow County Planning Department membership on the Jacksonville Technical Advisory Council. Land classification of the county area adjacent to Jacksonville is consistent with the Jacksonville Plan.

APPENDICES

FOR ONSLOW COUNTY
LAND DEVELOPMENT PLAN

Onslow County is in the process of preparing a Land Development Plan for future use by elected officials in compliance with the Coastal Area Management Act of 1974. It would be appreciated if you would take time to fill out this Opinion Survey in order that your opinions can be incorporated into the planning process.

1. Are you a permanent resident of Onslow County? _____ Yes _____ No
What township do you live in? _____

2. What is your occupation? _____

3. Do you live in a: () Single-family house
() Duplex
() Mobile home
() Apartment

4a. Do you expect the population of Onslow County to _____ increase,
_____ decrease or stay the same _____.

b. Would you like the population of Onslow County to _____ increase,
_____ decrease or stay the same _____?

5. Do you feel that different types of land uses such as residential, commercial, and industrial should be:

_____ A. Separated as much as possible

_____ B. Allowed to develop without restrictions

6. Do you want additional residential growth in your neighborhood?

_____ Yes _____ No Industrial Growth _____ Yes _____ No

Commercial Growth _____ Yes _____ No

7. What do you like most about Onslow County?

8. What do you like the least about Onslow County?

County ^{needs} in the following areas:

	<u>Needs More Attention</u>	<u>Needs Less Attention</u>	<u>Adequate</u>
water and sewer	()	()	()
air and water pollution	()	()	()
garbage collection	()	()	()
fire protection	()	()	()
police protection	()	()	()
schools	()	()	()
parks and recreation	()	()	()
streets and highways	()	()	()
environmental protection	()	()	()
industrial development	()	()	()
libraries	()	()	()
mosquito control & drainage	()	()	()
land use planning	()	()	()
rescue and ambulance	()	()	()

b. Would you be willing to pay for additional levels of service in areas you feel need more attention? _____ Yes _____ No

10a. Is there any particular area in Onslow County that you feel is unique or special and should be preserved or protected in its present state or form? _____ Yes _____ No

b. If answer to question above is "yes", please indicate the area that should be protected.

11. Please use the following space to make any additional comments about the Coastal Area Management Act that you would like.

Information concerning the Coastal Area Management Act is available from the Onslow County Planning Department. Please call 455-3661 and additional information will be mailed to you.

Please mail this questionnaire to the Onslow County Planning Department, 107 New Bridge Street, Jacksonville, N. C. 28540.

Thank you for your help and cooperation.

WEST ONSLOW BEACH
LAND USE PLANNING REPORT

PRELIMINARY DRAFT

SUBMITTED TO THE
ONSLOW COUNTY PLANNING BOARD
NOVEMBER 23, 1975

WEST ONSLOW BEACH, NORTH CAROLINA
COASTAL AREA MANAGEMENT ACT LAND USE PLAN

PREPARED FOR
ONSLow COUNTY PLANNING BOARD
JULIUS J. SEGERMAN, CHAIRMAN
A. BYRON ERVIN, JR.
WILLIAM D. PELON
RAYMOND A. HARTSFIELD, JR.
MACK M. WEATHERINGTON

TECHNICAL ASSISTANCE PROVIDED BY

STATE OF NORTH CAROLINA
DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
LOCAL PLANNING AND MANAGEMENT SERVICES SECTION
SOUTHEASTERN FIELD OFFICE

JOHN J. HOOTON, CHIEF PLANNER
COLLINS MORECOCK, PROJECT PLANNER
MELBA THOMPSON, PLANNER TECHNICIAN

NOVEMBER 23, 1975

INTRODUCTION

HISTORY OF COASTAL AREA MANAGEMENT PROGRAM AND WEST ONSLOW BEACH REPORT

The West Onslow Beach Report is a small, but important part of a program that is generally known as the Coastal Area Management Program. This program is composed of a partnership of Federal, state, and local governments, laws, administrative guidelines, and land use plans which has as its central purpose the preservation, protection, and development of the Nation's coastal zone through the application of a comprehensive planning and management process.

The program began in 1972 with the passage of the Coastal Zone Management Act (P. L. 92-583) by the United States Congress. This Federal Act authorized the Secretary of the U.S. Department of Commerce to make annual grants to states in developing a management program for the land and water resources of its coastal zone. North Carolina, as an eligible coastal state, began its coastal program in 1974 when the General Assembly passed the hotly debated Coastal Area Management Act in April of that year. Shortly thereafter, the state received its first grant under the Federal legislation and the North Carolina Department of Natural and Economic Resources, in conjunction with the Department of Administration, began administration of the Act in the fall of 1974. The North Carolina Coastal Area Management Act is different from other state coastal programs since it involves joint administration by local and state interests. This joint undertaking is accomplished in several ways. The first is the establishment of the Coastal Resources Commission. The members of the Commission are all coastal residents appointed by the Governor and most of whom were nominated by local governments for appointment. The second major avenue for local government involvement is the development of land use plans by the local governments. Each county and city within the 20 county coastal area is to develop a land use plan for submission and approval by the Coastal Resources Commission by May of 1976. Guidelines for the development of this plan were adopted by the CRC in January of 1975 and subsequently amended in October of the same year. In order to assist with the technical phases of the plan's development, the county contracted with the Local Planning and Management Section of the Department of Natural and Economic Resources to provide a report identifying and describing existing land uses and proposed Interim Areas of Environmental

Concern; and, in addition, make recommendations for future development alternatives for the Beach. The description of services to be provided under the report is included in the Appendix. This document represents the first draft of the report and has been submitted to

the County Planning Department on November 23, 1975, for informal review. This draft is not to be interpreted in any way as an approved report of the County Planning Board or County Commissioners.

Purpose of the Plan for Onslow County

The question most often asked is why must Onslow County prepare a land use plan. A major purpose of the local land use plan is to permit local governments to share in the regulation of Areas of Environmental Concern that may be found to be within the County jurisdiction. This sharing is to be accomplished through the development of a comprehensive land use plan that would act as a vehicle for expressing overall community needs that might require a different land usage within an AEC than that stated by the CRC in the Guidelines. If the proposed land use differs from that intended by the CRC it may still be acceptable and the land use plan approved if consistent with the Guidelines. Failure to accept the responsibility for preparation of a land use plan waives the responsibility and authority to the CRC. Thus it is of the greatest importance that the land use plan be developed with widespread public participation and project its future land needs on the basis of this support. The CRC has continuously stressed the importance of this type of support from the public. Accordingly, Section addresses past public participation efforts and future planned efforts in Onslow County.

Planning Area

The area covered by this report is all of that portion of Topsail Island between the Pender County Line and the New River Inlet and between the Atlantic Ocean and the Atlantic Intracoastal Waterway.

Methodology and Content

The original methodology for writing this report anticipated a brief inventory of the socio-economic and physical characteristics of the Beach, an analysis of these characteristics, and suggestion of possible development alternatives under the Coastal Area Management Act, County Zoning Ordinance and other applicable regulations. Much of the original effort was devoted to the mapping of proposed Interim AEC's as specifically required by the draft of the proposed amendments to the Guidelines. However, when the adopted version was received on November 10, two weeks prior to the November 24, submission date, this requirement was made optional instead of mandatory. Therefore, while delineation of proposed Interim AEC's is certainly useful to the County for illustration purposes, the time and expense involved in this phase of the report has diverted the limited available financial resources from other areas of study. Thus more detailed attention will be given to future development alternatives in the second draft of the report.

PUBLIC PARTICIPATION

The public participation program on West Onslow Beach has been mainly composed of a citizen opinion survey that was mailed to all property owners on the Beach whose names and addresses were available from the county tax offices. The results of this survey are summarized on the following table. As can be seen from the summary most of the 121 people responding to the survey would like to see the population of the Beach increase slightly but only in single-family residential housing(except mobile homes)served with water and sewer facilities.

Most people would like to have more open space and recreational land on the beach but would not support an increase in taxes to pay for it, except in some cases for mosquito control. If more public funds are to be spent the respondents felt that top priority, in order, should be given to water and sewer facilities, garbage collection, and fire and police protection. Generally, it was felt that development should not be permitted on dunes, in the marshes, or near inlets and that these natural features were unique or special and should be preserved or protected in their present state.

Summary of Citizen Opinion Survey For West Onslow Beach

Respondents who would like to see the population of West Onslow Beach:

increase greatly	24
increase slightly	52
decrease greatly	3
decrease slightly	4
stay the same	27

Respondents who would like to see more or less of the following types of development:

single family housing	93
apartments	16
condominiums	24
mobile homes	16
commercial	23
public open space	50
public recreation facilities	70

- Respondents that would support land use regulations to restrict development - 36
- Respondents that would not support land use regulations to restrict development - 11
- Respondents that would support an increase in taxes to pay for public open space - 35

-- Respondents that would not support an increase in taxes to pay for public open space - 53

-- Respondents that felt more public funds should be spent for:

	<u>More</u>	<u>Less</u>
water and sewer	88	3
garbage collection	72	6
fire and police	65	4
schools	19	16
parks and recreation	35	14
local planning	37	12
roads or public transit	40	14
environmental protection	50	15

-- Respondents that felt development should be permitted in:

	<u>never</u>	<u>seldom</u>	<u>frequently</u>	<u>always</u>
lands near inlets	35	21	21	10
beaches	15	15	26	25
marshes	44	12	13	9
dunes	52	10	14	10
inland waterways	11	12	16	24

The results of the survey indicate that the general feeling of Beach property owners is that gradual increases in single-family conventional residences, served by major public facilities (particularly water and sewer), and located so that the important natural resources of dunes, marshes, inlet lands, and beaches are not disturbed, should be the future development trend for the Beach; enforcement of such land use regulations as zoning ordinances is an acceptable and desirable means for assuring that this land future use pattern is achieved.

ENVIRONMENTAL INVENTORIES

Using 1974 aerial photography flown by the Department of Transportation, supplemented by a windshield survey, an existing land use inventory was made of the Beach. These uses are mapped on the Existing Land Use Map submitted with this report. The results of this survey are shown in the following table:

Existing Land Uses--West Onslow Beach

<u>Use</u>	<u>Acres</u>	<u>% of Total</u>
Residential	155.20	4.7
Commercial	26.11	0.7
Undeveloped	749.00	22.8
Wetlands	1788.50	54.4
Beaches	564.30	17.1
TOTALS	3282.6 or (5.12 square miles)	100%

As can be seen from the map and table the majority of the land 54.4 percent on the Beach is in the Wetlands category. The second biggest category is the Undeveloped class with 22.8%. Beaches, 17.1% are the third biggest class. Thus, nearly one-fourth of the 5.12 square miles in the planning area is available for future development. The 1,788.50 acres included in the Wetlands category cannot be realistically considered for development since these are entirely marshlands covered by marsh grass known as smooth cordgrass (Spartina alterniflora), and to develop these lands would require extensive filling. Such filling generally requires an easement from the North Carolina Department of Administration and such easements for any sizeable areas have usually been denied since marshlands are considered to be public trust lands (i.e. are lands covered by mean high water). For the same reason the beach areas can be logically excluded from consideration for future development.

A survey of the types of dwelling units was conducted by a local realtor and the results of this survey are shown below:

<u>Type of Unit</u>	<u>Number</u>	<u>% of Total</u>
single	283	24.1
multiple	81	6.9
motels	34	2.8
mobile homes	776	66.1
TOTALS	1173	100%

As the results of this survey clearly indicate the type of dwelling unit is the single-family unit and that mobile homes predominate, 66.1% of all units.

POPULATION AND ECONOMY

Because the West Onslow Beach planning area is not incorporated, the decennial census data is mixed with the Onslow County data and cannot be extracted. However, the engineering firm of Henry von Oesen and Associates, and Coastal Zone Resources Corporation, have conducted surveys in the area in an attempt to determine existing permanent and seasonal populations in Topsail Beach, Surf City, and West Onslow Beach. These estimates will be accepted for this plan and credit is extended to those firms. These estimates and projections based on the assumption that the proportions will remain constant, are shown in the table below.

	permanent	average seasonal	peak seasonal	maximum ¹ population
1975	290	2040	3670	3960
1985	742	5155	9275	10017
1995	1430	9827	12869	19299

(1) permanent plus peak seasonal

As can be seen from the table, increases in the peak seasonal population of 5605 persons (153%) and 8594 persons (92%) may be expected between the years of 1975-1985 and 1985-1995. The peak seasonal population does not mean that that particular number of persons would be present in the area at a particular time but rather that that many persons could be expected to visit the area on a peak day such as a weekend day during the months of June, July, or August or the Fourth of July or Labor Day. While the peak seasonal population projections for 1985 and 1995 may seem high, by comparison they are low. The peak seasonal population estimate for 1975 for the Town of Wrightsville Beach is approximately 16,000. As these figures indicate there are two different types of population that use the beach area, permanent and seasonal, and it

is the seasonal population that will have the greatest impact on land use.

The economy of the area is recreation and tourist oriented and consists mostly of four piers, two motels, and several service related businesses.

It is extremely doubtful that any other economic base will be established in the area and increases in tourist and recreation businesses may be expected as the population, permanent and seasonal, increases.

AREAS OF ENVIRONMENTAL CONCERN

The October 15 amended State Guidelines for Local Planning require local governments to identify the proposed Interim Areas of Environmental Concern (IAEC) within the jurisdiction. Identification in this sense means a "written listing of the AEC's occurring within a jurisdiction." In order to give local governments an opportunity to become further involved in the planning process the local government is given the option of delineating (portraying on a map) all of the lands or waters that may fall within an IAEC. The following is a listing of those IAEC's identified within the West Onslow Beach planning area and a summary of the policy objective and appropriate land uses the complete text of the Guidelines should be consulted.

- (1) Coastal Wetlands - The extent of these lands is generally defined by the existence of some, but not necessarily all, of certain salt marsh plants. The major dominant plant is smooth cordgrass (Spartina alterniflora) and the presence of this species defines the limits of low tidal marsh, or marsh area that is covered twice a day by the rise and fall of lower tides. However, coastal wetlands also include adjacent lands that are only occasionally flooded and the presence of such species as Blackneedle rush (Juncus roemerianus), Salt meadowgrass (Spartina patens), and cattail (Typha, spp.) will define the limits of these adjacent lands. The policy objective is to give the highest priority to preservation of these lands and any development, such as business, residences, parking lots, disposal sites, or roads, which alter their natural function is inappropriate.
- (2) Estuarine Waters - Estuarine waters are virtually all of the water in the Intracoastal Waterway, sounds, and Atlantic Ocean to the limits of states jurisdiction. In addition they extend inland on rivers to approximately the limits of seawater encroachment. Their importance lies in the fact that 90% of the total value of the commercial fisheries catch in North Carolina comes from species that are dependent upon the Estuarine Waters for breeding or reproduction. Appropriate uses of such water must not interfere with the preservation, management, and perpetuation of their biological, economic, and aesthetic values.
- (3) Certain Public Trust Areas - The idea of a public trust is generally that the state holds the title to lands beneath all the waters below mean high tide in trust for all the people of the state. The concept originated nearly 200 years ago in English common law, long before the passage of the Coastal Area Management Act and is a valid doctrine regardless of the Act. The CAMA only reinforces this doctrine by identifying public trust areas as IAEC's. The definition included in the State Guidelines is basically that a public trust area includes all the waters of the Atlantic Ocean and navigable waters and the lands thereunder from the mean high water mark to the seaward limits of the state's juris-

diction. Appropriate land uses in such areas shall be only those consistent with the protection of public rights for navigation and recreation and the preservation and management of their biological, economic, and aesthetic value.

- (4) Sand Dunes along the Outer Banks - A sand dune is defined in the State Guidelines as a ridge or mound of development in loose wind blown material, usually sand. Developed in these areas should only be undertaken if sound engineering practices, including site preparation and maintenance, are undertaken to minimize the erosive effects of wind and water.
- (5) Ocean Beach - These are land areas without vegetation and consists of unconsolidated soil material that extends landward from the mean low tide to the toe of the dune. Land uses appropriate for these areas are those that will preserve the opportunity to enjoy the physical, aesthetic, cultural, and recreational qualities of the natural shoreline of the state so as not to unreasonably interfere with the rightful use and enjoyment of the beach area.
- (6) Ocean Erodible Areas - This is the area above mean high water where excessive erosion has a high probability of occurring as defined by the recession line of a 25 year storm. Land uses that cause unnecessary hazards to life and property or unreasonable requirements for public expenditures to protect property or maintain safe conditions shall not be allowed in these areas.

The general extent of these areas is delineated on the proposed IAEC maps submitted with this report. These maps are intended only for general illustration purposes and should not be interpreted in any way as a basis for the issuance of permits.

There are several IAEC categories that will not be delineated or actually identified in this preliminary draft because of insufficient information. However, field observations and general knowledge of the area indicate, that the following proposed IAEC's may exist within the planning area: Coastal Floodplains, Special Aquifer Areas, Complex Natural Areas, Sound Erodible Areas, and Coastal Inlet Lands. If sufficient information is available prior to submission of the final report these potential IAEC's will be identified and delineated.

DEVELOPMENT ALTERNATIVES FOR WEST ONSLOW BEACH

In developing alternative schemes for development, several factors need to be considered. These are the different types, locations, intensities of desired development and the various constraints--legal, physical, and economic on each of these various types, locations and intensities. In considering these factors and selecting a development plan, the Planning Board and Commissioners will be deciding how to use a unique and irreplaceable county resource so that the welfare and enjoyment of all citizens of the county is maximized. With the construction of the new bridge and relocation of highway 210, development pressures have been greatly increased and failure to take positive and decisive action will inevitably result in a reduction, and possibly destruction of those values that make the West Onslow Beach area important to the entire county.

The type of land use mix that appeared most desirable to citizens of the area based on the opinion survey is predominantly single-family residential (exclusive of mobile homes) with normal tourist and recreation oriented commercial facilities. Two basic questions must be answered with regard to this alternative. Should mobile homes be excluded and what types and how much commercial development is desirable? While mobile homes have become to be acceptable homes for many Americans, their use in a beach environment is highly questionable. Most mobile homes on North Carolina's coast have not been subjected to severe storms such as hurricanes, and some long time observers predict a major catastrophe when a hurricane of the force of Hazel strikes--as inevitably it will. Nearly 5,000 mobile homes yearly are destroyed by high winds in the U.S. because of their vulnerability to high winds and light weight construction with flat sides and winds. The winds of hurricanes, tornadoes, and severe storms can toss unanchored mobile homes around, roll them over and smash them into neighboring mobile homes and adjacent properties. Thus, if mobile homes are to be considered as equivalent to conventional single family housing then they should meet the same safety requirements of stability and lot size requirements if on site disposal of sewage is necessary.

A second important question relates to the intensity of residential development. While this question will not have to be determined until water and sewer facilities are available, the presence of high rise apartments or condominiums in the beach area may become a possibility if sewer facilities are eventually made available under the current 201 facilities plan.

The location and intensity of development will be largely controlled by the County Zoning Ordinance, the Coastal Area Management Act, the septic tank rules and regulations, Federal and State water quality laws, the County Dune Protection Ordinance, and the North Carolina dredge and fill law. While the ultimate effect of the Coastal Area Management Act cannot be determined at this time, the other laws will effectively prohibit development in marshlands and surrounding waters, on beaches or sand dunes, and in those areas where septic tanks may not be approved. Thus, the development pattern that will emerge will largely be guided by the availability of properly zoned suitable sites for development.

However, the impact of available water and sewer facilities would probably result in a drastic alteration of existing land use patterns and it is critical that county officials decide soon whether or not a more intense level of development is desirable. While more intense development may raise land values and therefore property taxes and revenues, the loss to all county citizens of an accessible and valuable resource may more than offset this gain.

